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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 98 [EPA-HQ-OAR-2010-0929; FRL-9801-2] RIN 2060-AQ81

Revisions to Reporting and Recordkeeping Requirements, and Proposed Confidentiality

Determinations under the Greenhouse Gas Reporting Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA is proposing amendments to reporting and recordkeeping requirements and an alternative verification approach for the Greenhouse Gas Reporting Program. This action addresses concerns about the potential release of certain data that are inputs to emission equations for which the reporting deadline was deferred until March 31, 2015 while maintaining the EPA's ability to verify emissions and ensure compliance with the Greenhouse Gas Reporting Program. In addition, the EPA is proposing confidentiality determinations for the newly proposed data elements in this action.

DATES: Comments. Comments must be received on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Public Hearing. The EPA will hold a public hearing on this proposed rule if requested.

Requests for a hearing must be made by [INSERT DATE 7 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER]. Contact the person listed in the "FOR

FURTHER INFORMATION CONTACT" section by [INSERT DATE 7 DAYS AFTER

DATE OF PUBLICATION IN THE FEDERAL REGISTER] to request a public hearing. If a hearing is requested, the EPA will announce the details, including specific dates, times, addresses and contact information for the hearing, in a separate <u>Federal Register</u> notice. **ADDRESSES:** Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2010-0929, by one of the following methods:

- <u>Federal eRulemaking Portal</u>: <u>http://www.regulations.gov</u>. Follow the online instructions for submitting comments.
- <u>Email</u>: GHGReportingCBI@epa.gov
- Fax: (202) 566–1741.
- Mail: Environmental Protection Agency, EPA Docket Center (EPA/DC), Mailcode
 6102T, Attention Docket ID No. EPA-HQ-OAR-2010-0929, 1200 Pennsylvania
 Avenue, NW., Washington, DC 20460.
- Hand Delivery: EPA Docket Center, Public Reading Room, William Jefferson Clinton
 Building West, Room 3334, 1301 Constitution Avenue, NW., Washington, DC 20004.
 Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OAR–2010-0929. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at http://www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be confidential business information (CBI) or other information whose disclosure is restricted by statute.

Do not submit information that you consider to be CBI or otherwise protected through http://www.regulations.gov or email. Send or deliver information identified as CBI to only the mail or hand/courier delivery address listed above, attention: Docket ID No. EPA-HQ-OAR-2010-0929. The http://www.regulations.gov website is an "anonymous access" system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through http://www.regulations.gov your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the http://www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in http://www.regulations.gov or in hard copy at the Air Docket, EPA/DC, William Jefferson Clinton Building West, Room B102, 1301 Constitution Ave., NW., Washington, DC. This Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER GENERAL INFORMATION CONTACT: Carole Cook, Climate Change Division, Office of Atmospheric Programs (MC–6207J), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (202) 343–9263; fax number: (202) 343–2342; email address: GHGreporting@epa.gov. For technical information, contact the Greenhouse Gas Reporting Rule Helpline at:

http://www.epa.gov/climatechange/emissions/ghgrule_contactus.htm. Alternatively, contact Carole Cook at 202–343–9263.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of this proposal, memoranda to the docket, and all other related information will also be available through the WWW on the EPA's greenhouse gas reporting rule Web site at http://www.epa.gov/climatechange/emissions/ghgrulemaking.html.

SUPPLEMENTARY INFORMATION:

Additional Information on Submitting Comments: To expedite review of your comments by Agency staff, you are encouraged to send a separate copy of your comments, in addition to the copy you submit to the official docket, to Carole Cook, Climate Change Division, Office of Atmospheric Programs (MC–6207J), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC, 20460, telephone (202) 343–9263, email GHGReportingCBI@epa.gov.

Regulated Entities. This proposed rule revision on reporting and recordkeeping requirements and verification procedures would affect entities that must submit annual greenhouse gas (GHG) reports under the Greenhouse Gas Reporting Program (40 CFR part 98). The Administrator has determined that 40 CFR part 98 is subject to the provisions of Clean Air Act (CAA) section 307(d). See CAA section 307(d)(1)(V) (the provisions of CAA section 307(d)

apply to "such other actions as the Administrator may determine"). Entities affected by this proposal are owners or operators of facilities that are direct emitters of GHGs, which include those listed in Table 1 of this preamble:

Table 1. Examples of Affected Entities by Category

Category	NAICS	Examples of affected facilities
		Facilities operating boilers, process heaters,
Combustion Sources		incinerators, turbines, and internal combustion engines.
	321	Manufacturers of lumber and wood products.
	322	Pulp and paper mills.
	325	Chemical manufacturers.
	324	Petroleum refineries and manufacturers of coal
		products.
	316, 326,	Manufacturers of rubber and miscellaneous plastic
	339	products.
	331	Steel works, blast furnaces.
	332	Electroplating, plating, polishing, anodizing, and coloring.
	336	Manufacturers of motor vehicle parts and accessories.
	221	Electric, gas, and sanitary services.
	622	Health services.
	611	Educational services.
	325193	Ethyl alcohol manufacturing facilities.
	311611	Meat processing facilities
	311411	Frozen fruit, juice, and vegetable manufacturing
		facilities.
	311421	Fruit and vegetable canning facilities.
Adipic Acid Production	325199	Adipic acid manufacturing facilities.
Aluminum Production	331312	Primary aluminum production facilities
Ammonia	325311	Anhydrous and aqueous ammonia production facilities.
Manufacturing		
Cement Production	327310	Portland Cement manufacturing plants.
Ferroalloy Production	331112	Ferroalloys manufacturing facilities.
Fluorinated GHG	325120	Industrial gases manufacturing facilities.
Production		
Glass Production	327211	Flat glass manufacturing facilities.
	327213	Glass container manufacturing facilities.
	327212	Other pressed and blown glass and glassware
		manufacturing facilities.
HCFC-22 Production and HFC-23	325120	Chlorodifluoromethane manufacturing facilities.
Destruction		

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Category	NAICS	Examples of affected facilities	
Hydrogen Production	325120	Hydrogen production facilities	
Iron and Steel	331111	Integrated iron and steel mills, steel companies, sinter	
Production		plants, blast furnaces, basic oxygen process furnace	
		shops.	
Lead Production	331419	Primary lead smelting and refining facilities.	
	331492	Secondary lead smelting and refining facilities.	
Lime Production	327410	Calcium oxide, calcium hydroxide, dolomitic hydrates	
		manufacturing facilities.	
Nitric Acid Production	325311	Nitric acid production facilities	
Petrochemical	32511	Ethylene dichloride production facilities.	
Production	325199	Acrylonitrile, ethylene oxide, methanol production	
		facilities.	
	325110	Ethylene production facilities.	
	325182	Carbon black production facilities.	
Petroleum and Natural	486210	Pipeline transportation of natural gas.	
Gas Systems ¹	221210	Natural gas distribution facilities.	
	211	Extractors of crude petroleum and natural gas.	
	211112	Natural gas liquid extraction facilities.	
Petroleum Refineries	324110	Petroleum refineries.	
Phosphoric Acid	325312	Phosphoric acid manufacturing facilities.	
Production			
Pulp and Paper	322110	Pulp mills.	
Manufacturing	322121	Paper mills.	
	322130	Paperboard mills.	
Silicon Carbide	327910	Silicon carbide abrasives manufacturing facilities.	
Production	225101	A11 1: 1 11 : C / : C :1:/:	
Soda Ash	325181	Alkalies and chlorine manufacturing facilities.	
Manufacturing	212391	Soda ash, natural, mining and/or beneficiation.	
Titanium Dioxide Production	325188	Titanium dioxide manufacturing facilities.	
Zinc Production	331419	Primary zinc refining facilities.	
Zino i roduction	331492	Zinc dust reclaiming facilities, recovering from scrap	
	001.92	and/or alloying purchased metals.	
	311411	Frozen fruit, juice and vegetable manufacturing	
		facilities.	
	311421	Fruit and vegetable canning facilities.	
Wastewater Treatment ¹	322110	Pulp mills.	
	322121	Paper mills.	
	322122	Newsprint mills.	
	322130	Paperboard mills.	
	311611	Meat processing facilities.	
	311411	Frozen fruit, juice and vegetable manufacturing	
		facilities.	
	311421	Fruit and vegetable canning facilities.	

Category	NAICS	Examples of affected facilities
	325193	Ethanol manufacturing facilities.

¹ The EPA is not proposing amendments related to these categories; however, these categories were evaluated in the EPA's analysis of the potential impact from the release of inputs to emission equations for which reporting was deferred to March 31, 2015. Refer to Section 1.B of this preamble for further discussion of this evaluation.

Table 1 of this preamble is not intended to be exhaustive, but rather provides a guide for readers regarding facilities and suppliers likely to be affected by this action. Types of facilities other than those listed in this table may also be affected by this action. To determine whether you are affected by this action, you should carefully examine the applicability criteria found in 40 CFR part 98, subpart A or the relevant criteria in the subparts. If you have questions regarding the applicability of this action to a particular facility or supplier, consult the person listed in the preceding FOR FURTHER GENERAL INFORMATION CONTACT section.

Many facilities that are affected by 40 CFR part 98 have GHG emissions from multiple source categories listed in Table 1 of this preamble.

Acronyms and Abbreviations. The following acronyms and abbreviations are used in this document.

BAMM Best Available Monitoring Methods

CAA Clean Air Act CO₂ carbon dioxide

CBI confidential business information

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

e-GGRT Electronic Greenhouse Gas Reporting Tool
EPA U.S. Environmental Protection Agency

FR Federal Register

GHG greenhouse gas

GHGRP Greenhouse Gas Reporting Program

HCFC-22 chlorodifluoromethane HFC hydrofluorocarbons

HQ Headquarters

ICR Information Collection Request

MW megawatt

NAICS North American Industry Classification System

NTTAA National Technology Transfer and Advancement Act

OMB Office of Management & Budget

RFA Regulatory Flexibility Act

UMRA Unfunded Mandates Reform Act

U.S. United States
WWW Worldwide Web

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I. Executive Summary and Background

A. Executive Summary

The Greenhouse Gas Reporting Program (GHGRP) collects greenhouse gas data from 41 source categories and currently has received 2 to 3 years of data from these sources. Greenhouse gas emissions from direct emitters are calculated using a variety of methods, including direct measurement, mass balance, and the use of emission factors. Reporters not using direct measurement must use equations to calculate emissions. The inputs to these emission equations often include process or production data that are specific to each facility's operations. These inputs to emission equations play an important role in the EPA's ability to verify facility-level emissions and ensure compliance with the program.

On July 7, 2010, the EPA proposed confidentiality determinations for the majority of data elements required to be reported under the GHGRP, as well as for the majority of source categories covered by the program. In the July 7, 2010 action, the EPA proposed that data elements categorized as "inputs to emission equations" are emission data. The CAA precludes "emission data" from being treated as confidential.

Based on subsequent industry concerns regarding the potential release of data elements categorized as "inputs to emission equations," the EPA deferred reporting of these data elements (see August 25, 2011 final action, 76 FR 53057) to allow the EPA to complete its evaluation of the potential impact from the public release of these data elements (see 76 FR 53060, August 25, 2011) and, if appropriate, to propose amendments to Part 98 (see 75 FR 81355, December 27, 2010). Based on the analysis conducted, today's action proposes amendments to reporting and

recordkeeping requirements and an alternative verification approach for certain reporters subject to 24 subparts for which the reporting deadline for inputs to emission equations was deferred until 2015 and disclosure concerns have been identified. Proposed amendments include:

- Adding a requirement for certain reporters under 24 subparts to use an EPA-provided inputs verification tool. For these subparts, the designated inputs to emission equations for which reporting was deferred to 2015 and disclosure concerns have been identified would be entered into the tool. The tool would calculate the emissions and perform electronic verification. The tool would not retain the entered inputs (i.e., the inputs would not be reported to EPA); instead, the tool would conduct certain checks (e.g., accuracy of the inputs) at the time of data entry and generate a verification summary. The verification summary, which would be accessible to the EPA once the annual report is submitted, would provide the EPA with information to conduct further verification if necessary.
- For reporters required to use the inputs verification tool, changing the required format for maintaining records of these inputs to emission equations.
- For reporters required to use the inputs verification tool, lengthening the record retention period from 3 to 5 years for all records maintained under Part 98 (including subparts that do not require the use of the tool).
- For certain reporters required to use the inputs verification tool, adding new data elements to be reported for the EPA's verification purposes, and proposing confidentiality determinations for the new data elements proposed to be reported.

¹ Under this proposal, the inputs verification tool would not be required to be used by reporters for any reported GHG for which the reporter uses a CEMS or an EPA-approved alternative method (as allowed under sections 98.33(a)(5), 98.53(a)(2), and 98.223(a)(2) of Part 98) to calculate the reported GHG value, rather than using "inputs to equations" data elements and the associated EPA-provided calculation methodologies to calculate the reported GHG value.

• For reporters required to use the inputs verification tool, removing the requirement to report the inputs to emission equations for which reporting was deferred to 2015 and disclosure concerns have been identified, and requiring these data to be kept as records.

Reporting requirements for inputs to equations for which disclosure concerns were not identified (and would still be useful to the EPA) are not proposed to be amended in this action. For these inputs to equations, the deferral would expire in March 2015, and the EPA would collect these data.

The proposed changes in this action build on the EPA's experience and success with electronic reporting and verification during the first 3 years of the GHGRP. By requiring the use of the inputs verification tool, which would calculate GHG emissions based on the inputs to the emissions equations, the EPA would have the ability to identify facilities that potentially reported emissions incorrectly. This, combined with additional verification checks of the inputs to emission equations that the inputs verification tool would conduct (during the process of reporters entering data into the inputs verification tool), would provide the EPA with information necessary to conduct further verification once the annual report is submitted. This alternative verification approach, including the changes to the recordkeeping requirements and additional reporting requirements, would provide an alternative to collecting certain data elements for which reporting was deferred to March 31, 2015 and disclosure concerns have been identified, while maintaining the EPA's ability to verify data and ensure compliance with the GHGRP.

B. Background

On October 30, 2009, the EPA published the Greenhouse Gas Reporting Rule, 40 CFR part 98, requiring annual reporting of GHG data from a broad range of industry sectors (74 FR 56260). Under the Greenhouse Gas Reporting Rule and its subsequent amendments (hereinafter

referred to as "Part 98"), the EPA requires annual reporting of data from certain facilities and suppliers above specified emission or quantity supplied thresholds. On July 7, 2010 (75 FR 39094) and subsequent proposals (77 FR 1434, January 10, 2012; and 77 FR 10434, February 22, 2012), we proposed confidentiality determinations for the data elements required to be reported. The confidentiality of each reported data element was determined using a two-step approach: (1) grouping data elements into 11 data categories (e.g., inputs to emission equations, emissions, and unit/process operating characteristics that are not inputs to emission equations for direct emitter source categories); and (2) making confidentiality determinations either categorically or on an individual data elements basis. Refer to both the July 7, 2010 proposal (75 FR 39097) and the May 26, 2011 final rule (76 FR 30785 - 30786) for more detailed descriptions of this process. Refer to the May 26, 2011 final rule also for a discussion of individual data element confidentiality determinations. We have finalized confidentiality determinations for data elements except those in the "inputs to emission equations" category (May 26, 2011, 76 FR 30782; August 13, 2012, 77 FR 48072; and August 24, 2012, 77 FR 51477)². For data elements in this category, we proposed that they meet the definition of "emission data" under 40 CFR 2.301(a)(2)(i). Because emission data are not entitled to confidential treatment under section 114(c) of the Clean Air Act, we did not evaluate whether such data elements would qualify as CBI, including whether disclosure would likely cause substantial competitive harm to the reporting facilities (75 FR 39105 and 39108, July 7, 2010).

Following our proposal that data elements assigned to the "inputs to emission equations" category are not entitled to confidential treatment, we received numerous industry comments asserting that competitive harm would result from public release of many of these data elements.

² There are a small number of data elements (besides data elements categorized as "inputs to emission equations") for which we have not made a final confidentiality determinations because we concluded that a determination of confidentiality for the data element should be made on a case-by-case facility basis (according to individual circumstances of the facility).

We determined that "these concerns warranted an in-depth evaluation of the potential impact from the release of inputs to emission equations." (76 FR 53060, August 25, 2011). In a notice dated December 27, 2010, we issued a call for information (75 FR 81354) requesting additional information to assist us in conducting our evaluation. To allow sufficient time to complete this evaluation through notice and comment, we deferred the reporting deadline for data elements assigned to the "inputs to emission equation" category. Reporting of certain of these data elements was deferred to March 31, 2013, as specified in Table A-6 to subpart A; and reporting of the remainder of these data elements was deferred to March 31, 2015, as specified in Table A-7 to subpart A (see the August 25, 2011 final rule, 76 FR 53057).

Our process for evaluating competitive harm was documented in the final deferral notice (76 FR 53057, August 25, 2011) and the accompanying memorandum entitled "Process for Evaluating and Potentially Amending Part 98 Inputs to Emission Equations" (Docket ID EPA-HQ-OAR-2010-0929). As discussed in the final deferral notice and memorandum, our evaluation involved a four-step process, as follows:

- Step 1: Determine whether each data element assigned to the "inputs to emission equations" category is already publicly available.
- Step 2: For data elements assigned to the "inputs to emission equations" category that are not publicly available, evaluate whether disclosure of the information is likely to result in substantial competitive harm.
- Step 3: For data elements assigned to the "inputs to emission equations" category that are likely to cause substantial competitive harm if disclosed, evaluate potential alternative calculation methods.

• Step 4: For data elements assigned to the "inputs to emission equations" category that are likely to cause substantial competitive harm if disclosed, evaluate potential alternative verification methods.

Based on each step of the four-step evaluation process, an analysis of all data elements for which reporting was deferred to March 31, 2015 was conducted.³ The results of the analysis are documented in four memoranda, as follows:

- "Evaluation of Public Availability of Inputs to Emission Equations for which Reporting was Deferred to March 31, 2015."
- "Evaluation of Competitive Harm from Disclosure of 'Inputs to Equations' Data Elements Deferred to March 31, 2015."
- "Evaluation of Alternative Calculation Methods."
- "Evaluation of Alternative Verification Approaches For Greenhouse Gas Reporting Rule
 Subparts for which Reporting of Inputs to Emission Equations was Deferred to March 31,
 2015."

These memoranda are available in EPA docket ID No. EPA-HQ-OAR-2010-0929.

Based on the results of these analyses, the EPA is proposing in today's action to make certain amendments to Part 98.

C. <u>Subparts Covered in this Proposed Rule</u>

³ Based on the same four-step process, we also evaluated all data elements for which reporting was deferred to March 31, 2013 (Table A-6 to Part 98) and took no further action. As a result, applicable facilities were required to report these data by April 1, 2013. For a discussion of this evaluation, refer to the EPA's memorandum "Summary of Evaluation of Greenhouse Gas Reporting Program (GHGRP) Part 98 "Inputs to Emission Equations" Data Elements Deferred Until 2013" (December 17, 2012), available at http://www.epa.gov/ghgreporting/documents/pdf/2012/documents/2013-inputs-memo.pdf.

The proposed amendments affect all subparts listed in Table 2 of this preamble. Table 2 includes most of the subparts of Part 98 with inputs to emission equations for which the reporting deadline was deferred until 2015. Subpart W (Petroleum and Natural Gas Systems), subpart II (Industrial Wastewater Treatment), and subpart C (only certain combustion units associated with certain electric generators connected and able to deliver power to the local or regional electric power grid, as specified in Table 2) are not included in Table 2 because none of the inputs to emission equations required to be reported by reporters in these source categories are being amended, as no disclosure concerns were identified. Subpart I is not included in Table 2 because reporting of inputs to emission equations under this subpart was addressed under a separate rulemaking proposed on October 16, 2012 (77 FR 63538). Additionally, parts of these proposed rule amendments would affect subparts not listed in Table 2. Specifically, for reporters subject to both a subpart listed in Table 2 and a subpart of Part 98 not listed in this table, the proposed revision to the recordkeeping duration would apply to the records required for all Part 98 subparts (to which the reporter is subject). Refer to Sections II.C and III.B of this preamble for further discussion of this proposed amendment.

Table 2. Subparts Affected by the Proposed Amendments. 1,2

Subpart	
C—General Stationary Fuel Combustion except	S—Lime Manufacturing
Specified Stationary Fuel Combustion Sources	
Connected to Certain Electric Generators that are	
Connected and Able to Deliver Power to the Local	
or Regional Electric Power Grid ³	
E—Adipic Acid Production	U—Miscellaneous Uses of Carbonate
F—Aluminum Production	V—Nitric Acid Production
G—Ammonia Manufacturing	X—Petrochemical Production
H—Cement Production	Y—Petroleum Refineries
K—Ferroalloy Production	Z—Phosphoric Acid Production
L—Fluorinated Gas Production	AA—Pulp and Paper Manufacturing
N—Glass Production	BB—Silicon Carbide Production

Subpart	
O—HCFC-22 Production and HFC-23	CC—Soda Ash Manufacturing
Destruction	
P—Hydrogen Production	EE—Titanium Dioxide Production
Q—Iron and Steel Production	GG—Zinc Production
R—Lead Production	TT—Industrial Waste Landfills

¹ Certain proposed amendments affect other subparts not listed in this table as follows: for reporters subject to both a subpart listed in this table and a subpart of Part 98 not listed in this table, the proposed revision to the recordkeeping duration would apply to the records required for all Part 98 subparts to which the reporter is subject.

D. <u>Legal Authority</u>

The EPA is proposing these rule amendments under its existing CAA authority provided in CAA section 114. As stated in the preamble to the 2009 final GHG reporting rule (74 FR 56260, October 30, 2009), CAA section 114(a)(1) provides the EPA broad authority to require the information proposed to be gathered by this rule because such data would inform and are relevant to the EPA's carrying out a wide variety of CAA provisions. See the preambles to the proposed (74 FR 16448, April 10, 2009) and final Part 98 (74 FR 56260, October 30, 2009) for further information.

In addition, pursuant to sections 114, 301, and 307 of the CAA, the EPA is proposing confidentiality determinations for the new data elements proposed in this notice. Section 114(c) of the CAA requires that the EPA make publicly available information obtained under CAA section 114 except for information (excluding emission data) that qualifies for confidential

² Under this proposal, the inputs verification tool would not be required to be used by reporters for any reported GHG for which the reporter uses a CEMS or an EPA-approved alternative method (as allowed under 40 CFR 98.33(a)(5), 98.53(a)(2), and 98.223(a)(2)) to calculate the reported GHG value, rather than using "inputs to equations" data elements and the associated EPA-provided calculation methodologies to calculate the reported GHG value.

³ The stationary fuel combustion sources (e.g., individual units, aggregations of units, common pipes, or common stacks) not affected by the proposed amendments include those meeting both of the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators connected to combustion units that are subject to 40 CFR part 98, subpart D); and (2) the stationary fuel combustion source is located at a facility for which the sum of the nameplate capacities for all such electric generators is greater than or equal to 1 megawatt electric output. Refer to Section III.A.3 of this preamble for a discussion of the EPA's rationale for proposing that combustion units meeting these criteria not be affected by the proposed amendments.

treatment. The Administrator has determined that this action (Part 98 amendment and confidentiality determinations) is subject to the provisions of CAA section 307(d).

II. Summary of Proposed Changes to Part 98 Reporting and Recordkeeping Requirements

The EPA is proposing revisions to the reporting and recordkeeping requirements in Part 98 and alternative verification procedures that would apply to certain reporters subject to any of the 24 subparts listed in Table 2 of this preamble. Section II.A of this preamble summarizes a proposed new requirement for these reporters if they use inputs to emission equations for which reporting was deferred to March 31, 2015 (hereafter referred to as "inputs to equations" data elements) to calculate reported GHGs. Such reporters would be required to use an EPA-provided electronic inputs verification tool to calculate emissions using "inputs to equations" data elements, allowing the EPA to complete electronic verification of reported GHG emissions data without the need to collect "inputs to equations" data elements for which disclosure concerns have been identified. Section II.B of this preamble summarizes the EPA's proposal to remove, for these reporters, the requirement to report many "inputs to equations" data elements. Section II.C of this preamble summarizes proposed revisions to the recordkeeping requirements for these reporters. Section II.D of this preamble summarizes proposed new reporting requirements for these reporters. Section III of this preamble explains the rationale for the proposed amendments summarized in Sections II.A through II.D of this preamble. Section IV of this preamble presents the EPA's proposed confidentiality determinations for proposed new data elements and the EPA's rationale for these determinations. Section V of this preamble presents the cost and impacts associated with these proposed amendments.

A. Proposed Use of Inputs Verification Tool

The EPA is proposing that facilities subject to the subparts listed in Table 2 of this preamble and that use "inputs to equations" data elements to calculate reported GHGs use an electronic inputs verification tool being developed by the EPA, which would calculate and verify GHG emissions. Refer to Section III.A.1 of this preamble for a web-link to the EPA's "pilot" inputs verification tool for one subpart of Part 98, available during the public comment period for this rulemaking. The "pilot" demonstrates how the tool would work within the EPA's Electronic Greenhouse Gas Reporting Tool (e-GGRT), as well as the types of verification checks that would be conducted. The inputs verification tool would be deployed within e-GGRT and would be integrated without interrupting the current electronic reporting process. While reporters enter data into e-GGRT that are required to be reported in the annual report, reporters would also enter into e-GGRT (via the inputs verification tool) the "inputs to equations" data elements that the EPA is proposing to remove from the reporting requirements. The tool would use the entered "inputs to equations" data elements to calculate the equation outputs, conduct electronic verification checks on the "inputs to equations" data elements, and generate a verification summary. The tool would not retain the entered "inputs to equations" data elements for which the EPA is proposing that the reporting requirement be removed. Accordingly, the EPA would not have access to these "inputs to equations" data elements. Instead, the EPA would rely on the verification summary, which would become accessible to the EPA when annual reports are submitted, as a first step for conducting verification once the annual report is submitted.

Sources subject to multiple subparts under Part 98 would be required to use the inputs verification tool for only those subparts listed in Table 2 of this preamble. The EPA is proposing that reporters use this tool starting with reporting year 2014. Refer to Section III.A of this preamble for further discussion of this proposed requirement.

This proposed requirement to use the inputs verification tool is specified in 40 CFR 98.5, subpart A. Reporters would determine applicability under this new requirement based on a proposed new Table A-8 to Subpart A, which lists all calculation methods under Part 98 for which the inputs verification tool must be used. Reporters calculating reported GHGs using a calculation method specified in proposed Table A-8 would be required to enter into the inputs verification tool "inputs to equations" data elements that have been removed from the reporting requirements.

B. Proposed Revisions to Reporting of Data Elements Deferred until 2015

The EPA is proposing to remove the reporting requirement for 440 "inputs to equations" data elements in the subparts listed in Table 2 of this preamble. Table 3 of this preamble provides a summary of how many data elements would be removed from reporting for each subpart. Refer to Table 1 in the memorandum "List of 'Inputs to Equations' Data Elements Proposed Not To Be Reported" (refer to Docket ID No. EPA–HQ–OAR–2010-0929) for a complete list of these 440 data elements. For all remaining "inputs to equations" data elements not represented in Table 3 of this preamble, the EPA is not amending these reporting requirements and would, therefore, let the deferral of these data elements expire on March 31, 2015. As a result, by March 31, 2015, all of the "inputs to equations" data elements for subpart W (Petroleum and Natural Gas Systems), subpart II (Industrial Wastewater Treatment), and the additional "inputs to equations" data elements for which reporting is not proposed to be removed as indicated in Table 3 of this preamble, would be reported for future reporting years and for all prior reporting years, including reporting year 2014. For a list of these "inputs to equations" data elements that would be reported, refer to Table 2 of the memorandum cited above.

Table 3. Subparts for Which Reporting Requirements are Amended

Subpart	Number of "Inputs to Equations" Data Elements	Number of "Inputs to Equations" Data Elements Proposed Not to Be Reported
C—General Stationary Fuel	26 ¹	26 ¹
Combustion Except Specified		
Stationary Fuel Combustion		
Sources Connected to Certain		
Electric Generators Connected and Able to Deliver Power to		
the Local or Regional Power		
Grid ²		
E—Adipic Acid Production	21	11
F—Aluminum Production	29	29
G—Ammonia Manufacturing	8	8
H—Cement Production	16	14
K—Ferroalloy Production	13	13
L—Fluorinated Gas Production	55	46
N—Glass Production	3	3
O—HCFC–22 Production and	15	12
HFC–23 Destruction		
P—Hydrogen Production	7	7
Q—Iron and Steel Production	93	92
R—Lead Production	10	10
S—Lime Manufacturing	9	9
U—Miscellaneous Uses of Carbonate	6	6
V—Nitric Acid Production	21	6
X—Petrochemical Production	21	21
Y—Petroleum Refineries	80	75
Z—Phosphoric Acid Production	4	4
AA—Pulp and Paper Manufacturing	31	28
BB—Silicon Carbide Production	3	3
CC—Soda Ash Manufacturing	10	4
EE—Titanium Dioxide Production	2	2
GG—Zinc Production	8	8
TT—Industrial Waste Landfills	3	3

¹ Includes one "inputs to equations" data element, 40 CFR 98.3(d)(3)(v), which is specified in subpart A of Part 98 and applies to only certain reporters under 40 CFR part 98, subpart C.

In order to ease the burden for facilities, the EPA is proposing that the "inputs to equations" data elements that are not being amended in this action (and therefore would be reported for reporting years prior to reporting year 2014) be reported as part of the annual report for reporting year 2014. Specifically, when reporters prepare their reporting year 2014 annual report via e-GGRT, they would be required to include these "inputs to equations" data elements for reporting year 2014 as well as for all applicable previous reporting years. The annual report, including these "inputs to equations" data elements that would still be reported, would be submitted via e-GGRT. This proposed approach would prevent facilities from being required to revise, re-certify, and re-submit annual reports for each previous reporting year.

C. <u>Proposed Changes to Recordkeeping Requirements</u>

For each facility subject to a subpart listed in Table 2 of this preamble that uses "inputs to equations" data elements to calculate and report GHGs (i.e., subject to using the proposed inputs verification tool), the EPA is proposing that the facility retain all records, including records for subparts not subject to the inputs verification tool requirement, for 5 years, rather than the current 3-year record retention period. In other words, if any facility subject to using the proposed inputs verification tool is also subject to a subpart of Part 98 not listed in Table 2, we propose that records required for those other subparts also be maintained for the 5 years. For

² The reporting requirements applicable to certain stationary fuel combustion sources (e.g., individual units, aggregations of units, common pipes, or common stacks) subject to 40 CFR part 98, subpart C remain the same under the proposed amendment. Subpart C would continue to require reporting of all applicable "inputs to equations" data elements for stationary fuel combustion sources that meet both of the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators connected to combustion units that are subject to 40 CFR part 98, subpart D); and (2) the stationary fuel combustion source is located at a facility for which the sum of the combined nameplate capacities for all such electric generators is greater than or equal to 1 megawatt electric output. Subpart C reporters would not report "inputs to equations" data elements for all other types of stationary fuel combustion sources subject to subpart C.

example, if such a facility is required to report under both subpart C (in Table 2) and subpart HH (not in Table 2), the facility would be required to maintain all records required under both subparts for 5 years following submittal of the annual report. The EPA is proposing that this 5-year record retention requirement begin with records for reporting year 2010.

Additionally, we are proposing that, at the time a reporter subject to using the proposed inputs verification tool completes entry of all "inputs to equations" data elements into the tool, the reporter would be required to keep a file generated by the tool that lists the entered "inputs to equations" data elements. The reporter would be required to maintain a copy of the file as a record of the entered inputs. As currently required in 40 CFR 98.3(g), subpart A, this file may be maintained in electronic or hard copy format. As discussed above, this record would be required to be maintained for 5 years.

Refer to Section III.B of this preamble for further discussion of these proposed recordkeeping requirements.

D. Proposed New Data Elements to be Reported

The EPA is proposing that reporters subject to using the proposed inputs verification tool in subparts E, G, H, P, Q, S, V, X, Y, and AA of Part 98, be required to report the additional data elements listed per subpart in Table 4 of this preamble. Proposed confidentiality determinations for these proposed data elements are presented in Section IV of this preamble.

Table 4. Proposed New Data Elements for Subparts E, G, H, P, Q, S, V, X, Y, and AA of Part 98

Subpart	Subpart Name	New Data Element Description
Е	Adipic Acid Production	Annual quantity of cyclohexane fed to all production lines (metric tons).
		Annual percent N ₂ O emission reduction for all production units combined.
G	Ammonia Production	Annual ammonia production (metric tons).

Subpart	Subpart Name	New Data Element Description
		Annual methanol production (metric tons), if this quantity is not reported under subpart X.
Н	Cement Production	Annual clinker production (metric tons).
		Annual average clinker CO ₂ emission factor for the facility, averaged across all kilns (metric tons CO ₂ /metric ton clinker produced).
		Annual average cement kiln dust (CKD) CO ₂ emission factor for the facility, averaged across all kilns (metric tons CO ₂ /metric ton CKD produced).
P	Hydrogen Production	Name and annual quantity (metric tons) of each carbon-containing fuel and feedstock.
		Annual methanol production (metric tons), if this quantity is not reported under subpart X.
Q	Iron and Steel Production	If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The annual mass (metric tons) of all gaseous, liquid, and solid fuels (combined) used in process units specified in Equations Q-1 through Q-7 of subpart Q, calculated as specified in a proposed new Equation Q-9 of subpart Q in the proposed rule amendments. Do not include fuel used in a stationary combustion unit where emissions are reported under subpart C.
		If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The annual mass (metric tons) of all non-fuel material inputs (combined) specified in Equations Q-1 through Q-7 of subpart Q, calculated as specified in a proposed new Equation Q-10 of subpart Q in the proposed rule amendments.
		If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The annual mass (metric tons) of all solid and liquid products and byproducts (combined) specified in Equations Q-1 through Q-7 of subpart Q, calculated as specified in a proposed new Equation Q-11 of subpart Q in the proposed rule amendments.
		If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The weighted average carbon content of all gaseous, liquid, and solid fuels (combined) included in proposed new Equation Q-9 of subpart Q, calculated as specified in a proposed new Equation Q-12 of

Subpart	Subpart Name	New Data Element Description
		subpart Q in the proposed rule amendments.
		If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The weighted average carbon content of all non-fuel inputs to all furnaces (combined) included in proposed new Equation Q-10 of subpart Q, calculated as specified in a proposed new Equation Q-13 of subpart Q in the proposed rule amendments.
		If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The weighted average carbon content of all solid and liquid products and byproducts from all furnaces (combined) included in a proposed new Equation Q-11 of subpart Q in the proposed rule amendments, calculated as specified in new Equation Q-14 of subpart Q.
S	Lime Manufacturing	Annual quantity (metric tons) of lime product sold, by type.
V	Nitric Acid Production	Annual percent N ₂ O emission reduction for all production units combined.
X	Petrochemical Production	If using the mass balance method or CEMS method to calculate GHG emissions: Name and annual quantity (in metric tons) of each carbon-containing feedstock.
		If using the mass balance method or CEMS method to calculate GHG emissions: Name and annual quantity (in metric tons) of each carbon-containing co-product.
Y	Petroleum Refineries	Annual quantity of flare gas combusted (in MMscf per year) (only when using Equation Y-3 of subpart Y).
		Annual average molecular weight of flare gas combusted (in mmBtu per MMscf) (only when using Equation Y-3 of subpart Y).
		Annual average carbon content of flare gas combusted (expressed as a decimal fraction)(only when using Equation Y-3 of subpart Y).
AA	Pulp and Paper Manufacturing	For each pulp mill lime kiln: Quantity of calcium oxide (CaO) produced (metric tons).
		For each pulp mill lime kiln: Percent of annual heat input, individually for each fossil fuel type.
		For each chemical recovery furnace and chemical recovery combustion unit for which you are not using Equation C-2c of subpart C to calculate CO ₂

Subpart	Subpart Name	ame New Data Element Description	
		emissions: Annual mass of steam generated (lb steam), individually for each fossil fuel type and for spent liquor solids.	
	For each chemical recovery furnace and chemical recovery combustion unit for which you are not using Equation C-2c of subpart C to calculate CO ₂ emissions: Ratio of the unit's maximum rated heat input capacity to its design rated steam output capacity (mmBtu/lb steam), individually for each fossil fuel type and for spent liquor solids.		

III. Rationale for Proposed Changes to Reporting and Recordkeeping Requirements

Based on the four-step evaluation described in Section I.B of this preamble, in particular the disclosure concerns discussed in "Step 2" of the evaluation and the alternatives considered in "Step 3" and "Step 4" of the evaluation to address those disclosure concerns, the EPA is proposing an alternative verification approach. This approach involves use of an inputs verification tool and revisions to the reporting and recordkeeping requirements of Part 98. The EPA's rationale for this approach is presented in Sections III.A through C below. Section III.A addresses the proposed inputs verification tool and revisions to the requirement to report certain "inputs to equations" data elements. Section III.B addresses the proposed revisions to recordkeeping requirements. Section III.C addresses the proposed addition of new reporting requirements.

A. Proposed Inputs Verification Tool and Amendment to Reporting Requirements

The EPA is proposing that facilities using "inputs to equations" data elements to calculate reported GHGs under the subparts listed in Table 2 of this preamble use an EPA-provided electronic inputs verification tool, which would calculate and verify GHG emissions. The inputs verification tool would be deployed within e-GGRT and integrated without interrupting the current electronic reporting process. Reporters would enter their "inputs to equations" data

elements into the tool within the e-GGRT system along with the data required to be reported in the annual report (concurrent entry of "inputs to equations" data elements and data required for the annual report would be required starting in reporting year 2014, as further discussed in Section III.A.2 of this preamble). As a built-in feature of the e-GGRT system, the tool would use the entered "inputs to equations" data elements to calculate the equation outputs, conduct electronic verification checks on the "inputs to equations" data elements, and generate a verification summary. The tool would not retain the entered "inputs to equations" data elements for which the EPA is proposing that the reporting requirement be removed.⁴ Accordingly, unlike data currently reported to the EPA through e-GGRT, the EPA would not have access to these "inputs to equations" data elements.

Any such sources subject to multiple subparts under Part 98 would be required to use the tool for only those subparts listed in Table 2 of this preamble, as discussed in the following section.

1. <u>Detailed Description of Inputs Verification Tool.</u>

The EPA's current verification approach consists of electronic verification checks followed by direct follow-up with facilities. For subparts where the reporting of inputs to emission equations has been deferred until 2015, these checks have been conducted using reported data other than inputs to emission equations (the reporting of which was deferred). For "supplier" subparts (and starting in reporting year 2012 for subparts with inputs to emission equations that were deferred until 2013), these checks have been conducted using reported data that include the data needed to calculate outputs of the equations. Reporters under the supplier

⁴ Please see section III.A.3 of this preamble for a discussion on which "inputs to equations" data elements the EPA is proposing that the reporting requirements be removed.

⁵ Supplier subparts (subparts LL through PP of Part 98) apply to fossil fuel suppliers and industrial gas suppliers. The e-GGRT system currently calculates equation outputs for suppliers using reported equations inputs. Subpart MM reporters began using e-GGRT for reporting in Reporting Year 2012.

subparts have been entering into e-GGRT the data needed to calculate the annual GHG quantities. For reporters under the direct emitter subparts listed in Table 2 of this preamble that are using "inputs to equations" data elements to calculate reported GHGs, the EPA is proposing to use an approach similar to that currently used for the supplier subparts, where "inputs to equations" data elements would be entered into the inputs verification tool within e-GGRT and used to calculate the annual GHG emission values and verify these emission values. The difference, however, is that these "inputs to equations" data elements would be entered into this new inputs verification tool within e-GGRT and would not be reported to the EPA.

To access the inputs verification tool, reporters would log into e-GGRT. They would enter data elements required for the annual report as well as their "inputs to equations" data elements. The tool would operate securely within e-GGRT, as a transient process, which means that "inputs to equations" data elements (for which the EPA is proposing that the reporting requirement be removed) entered into the tool would be temporarily saved in the tool while the reporter is actively using the tool, but would not be persisted (i.e., saved) within the e-GGRT database. The "inputs to equations" data elements would be discarded when the user's session with e-GGRT ends. Refer to the memorandum "Technical Approach and Design for Inputs Verification Tool" (refer to Docket ID No. EPA–HQ–OAR–2010-0929) for a detailed description of EPA's technical approach and design for the inputs verification tool. The memorandum describes how the inputs verification tool would use entered data only during the reporters' e-GGRT session and would delete all records of entered data when the reporters exits the system.

If the reporter exits the inputs verification tool prior to completing data entry or submitting their annual report, the tool would generate a file of entered "inputs to equations" data

elements, and allow the reporter to download the file. This file could then be uploaded into the tool when the reporter next uses the tool to continue with data entry for the same reporting year. This would avoid facilities from needing to re-enter "inputs to equations" data elements that were entered in previous e-GGRT sessions.

After the reporter enters the "inputs to equations" data elements into the inputs verification tool, the tool would calculate the annual GHG emissions values. The tool would use the following information in calculating these values: (1) "inputs to equations" data elements (for which reporting under this action is proposed to be removed) entered into the tool, (2) "inputs to equations" data elements entered into e-GGRT (not into the inputs verification tool) (refer to Section III.A.3 of this preamble for a discussion of the "inputs to equations" data elements that would still be reported under this proposal), (3) information entered into e-GGRT identifying which Part 98 calculation method was selected (if applicable), and (4) the selected Part 98 calculation method. Once the annual GHG emissions values are calculated, the values would be pre-filled into the appropriate reporting fields within e-GGRT. Reporters would then have the opportunity to override the annual GHG emissions values calculated by the tool with their own calculated value. If the reporter chose to override the calculated value, this would be reflected in the verification summary.

Prior to annual report submittal, the inputs verification tool would conduct a series of verification checks, including the following:

- Verification checks on the annual GHG emission values calculated by the inputs verification tool. As mentioned above, reporters would have the opportunity to override and revise the value calculated by the tool; however should this occur, the tool would note a discrepancy, which would prompt the EPA for further review after the reporter submits the annual report.
- Verification checks on entered "inputs to equations" data elements. For example, the tool would check: (1) whether all required data were entered; (2) whether entered "inputs to equations" data element values are within the expected ranges for the data elements; and

(3) whether expected relationships exist between certain "inputs to equations" data elements and certain other reported data elements (e.g., process raw material or throughput data that are not "inputs to equations" data elements).

Some of these checks would be conducted as the reporter enters "inputs to equations" data elements (i.e., using "real-time" checking), and other checks would be conducted after the reporter has entered all "inputs to equations" data elements, because some algorithms may compare certain "inputs to equations" data elements (e.g., production quantity) to GHG emission values at the subpart or facility level.

Also, prior to submittal of the annual report, the inputs verification tool would generate a verification summary containing the results of the verification checks. The verification summary would specify whether any potential errors, as described above, were identified, without specifying the "inputs to equations" data elements. The reporter would have an opportunity to review the verification summary and make necessary revisions to the entered "inputs to equations" data elements and the reported data elements.

For example, a facility subject to subpart G that manufactures ammonia using liquid and solid feedstocks is currently required under 40 CFR 98.76(b)(1) to report annual CO₂ process emissions for each ammonia manufacturing unit. Currently, the reporter calculates this reported annual GHG emissions value outside of e-GGRT (e.g., using a calculator or computer software), using Equations G-2, G-3, and G-4 of Part 98, and monthly values for the following "inputs to equations" data elements: quantity of liquid feedstock, quantity of solid feedstock, carbon content value for liquid feedstock, and carbon content value for solid feedstock. We are proposing that the reporter instead calculate this reported annual GHG emissions value using the inputs verification tool, which not only would use the same equations and data for calculation, but would also conduct verification checks, as follows:

- The reporter would enter all 48 "inputs to equations" data elements into the inputs verification tool (i.e., monthly values for all four "inputs to equations" data elements).
- The reporter would use the inputs verification tool to calculate annual CO₂ process emissions. In calculating this value, the tool would use Equations G-2, G-3, and G-4 of Part 98 and the 48 "inputs to equations" data element entries.
- Once the annual CO₂ process emissions value is calculated, the inputs verification tool would automatically conduct verification checks on the 48 entered "inputs to equations" data elements. For example, the tool might conduct the following checks:
 - Real-time checks that all 48 "inputs to equations" data elements were entered.
 - Real-time checks that each of the 12 entered values for carbon content of liquid
 feedstock is within the expected range for carbon content of liquid feedstock (based
 on industry-wide data). The tool would conduct similar comparisons for the 12
 entered "inputs to equations" data elements for the carbon content value for solid
 feedstock.
 - Algorithm check comparing each of the 12 entered values of the quantity of the liquid feedstock to all monthly values entered for the year, to determine if individual values are within an expected range established using all 12 values. The tool would conduct similar comparisons for the 12 entered "inputs to equations" data elements for the quantity of solid feedstock. This type of check would be conducted after the reporter has entered all "inputs to equations" data elements.
- Prior to annual report submittal, the inputs verification tool would automatically generate a verification summary, which would flag any potential errors, providing an opportunity

for the reporter to review the verification summary and revise entered data. The verification summary would note if the reporter has overridden any of the annual GHG emissions values calculated by the tool. After the reporter completes all revisions to data entries, the tool would automatically re-generate the verification summary prior to annual report submittal. The EPA would access the verification summary (i.e., the same final summary viewed by the reporter) following annual report submittal and certification.

• The inputs verification tool would also generate a file listing the entered "inputs to equations" data elements (for which the EPA is proposing to remove the reporting requirements) to be kept by the reporter and maintained as a record in a format currently allowed under Part 98 (see 40 CFR 98.3(g), subpart A). Refer to Section III.B of this preamble for further discussion of this proposed amendment and the EPA's rationale for requiring this record.

The EPA has developed a "pilot" inputs verification tool for one subpart of Part 98, subpart X, which will be posted at

http://www.epa.gov/ghgreporting/reporters/training/rulepilot.html, to demonstrate how the tool would work within e-GGRT, as well as the types of verification checks that would be conducted. The EPA seeks comment on the usability of the tool as well as its ability to conduct verification on the "inputs to equations" data elements. The EPA also seeks comment on additional approaches considered by the EPA for implementation of the inputs verification tool; refer to the memorandum "Evaluation of Alternative Verification Approaches for Greenhouse Gas Reporting Rule Subparts for which Reporting of Inputs to Emission Equations was Deferred to March 31, 2015" (refer to Docket ID No. EPA–HQ–OAR–2010-0929) for a description of these additional approaches considered.

2. <u>Rationale Supporting the Use of the Inputs Verification Tool as an Alternative to Collecting</u>
Certain "Inputs to Equations" Data Elements for Verification Purposes.

In the October 30, 2009 final rule (74 FR 56282 – 56283), the EPA described its verification approach as the following two-step process:

- Initial automated review of reported data, using an electronic data quality assurance program built into the data system, for use by reporters and the EPA to help assure the completeness and accuracy of data.
- Based on the initial review results, follow up with facilities regarding potential errors,
 discrepancies, or questions, including on-site audits.

The EPA is currently using the two-step verification process of automated verification checks followed by direct follow-up with facilities to verify data currently reported via e-GGRT. The EPA is proposing to supplement the current verification approach for facilities using "inputs to equations" data elements to calculate reported GHGs under the subparts listed in Table 2 of this preamble using the additional checks that would be conducted by the inputs verification tool. During the first 3 years of the GHGRP, the EPA has had success developing and using an electronic reporting and verification system for all subparts reporting under the program. During reporting year 2010, the EPA developed approximately 1,400 electronic verification checks to verify reported data. Based on these verification checks, the EPA followed up with approximately 2,360 of the approximately 6,700 facilities that reported in reporting year 2010, resulting in approximately 2,300 facilities resolving verification issues by responding to the EPA and/or resubmitting their annual report. In reporting year 2011, the EPA programmed an additional 1,000 checks into e-GGRT for the subparts that were reporting for the second year, expanding the number of checks to 2,400. The EPA also programmed into e-GGRT, for 2011,

approximately 1,300 checks for the newly-reporting subparts. During reporting year 2011, the EPA followed up with approximately 3,440 of the approximately 8,000 facilities that reported, resulting in approximately 3,000 facilities resolving their verification issues.

For example, for subpart H, the EPA verifies reported GHG emissions data using: (1) reported cement production data and (2) publicly available industry data on GHG emissions.

Using these data, the EPA has established ranges of acceptable production and emission values and set up algorithm checks for reported GHG emission values.

The electronic checks used by the GHGRP have served as a means for the EPA to verify reported data while minimizing the burden on both the EPA and reporters. Electronic verification is a critical first step to ensuring the completeness and accuracy of reported data and reducing the costs of compliance monitoring.

The inputs verification tool described in Section III.A.1 of this preamble utilizes the same approach that the EPA currently uses for calculating and verifying data submitted for supplier subparts (and starting in reporting year 2012, inputs to emission equations whose reporting deadline was deferred until 2013), except that e-GGRT would not retain the "inputs to equations" data elements entered into the tool. Once the annual report is submitted, the EPA would review the verification summary generated by the inputs verification tool, along with verification summaries that are currently generated using data currently collected through the annual report. By requiring use of the inputs verification tool, the EPA would have the additional certainty that reported annual GHG emissions values either were calculated correctly (because the values calculated by the tool were submitted to the EPA) or that the EPA would be made aware that there were discrepancies between values calculated by the tool and values submitted to the EPA. That additional certainty, combined with the additional information provided by the

range and algorithm checks on the "inputs to equations" data elements themselves, would provide the EPA with information necessary to conduct further verification once the annual report is submitted.

If a potential error with one of the "inputs to equations" data elements or with an annual GHG emissions value were identified in the verification summary generated by the inputs verification tool, the EPA would likely follow up with the facility to determine whether an actual error has occurred. While this verification approach may result in more direct follow-up with facilities than if the "inputs to equations" data elements were submitted to the EPA, this approach would facilitate verification by identifying potential errors and minimizing the number of errors before annual reports are submitted. In addition, as discussed elsewhere in the preamble, the EPA is retaining the reporting requirement for "inputs to equations" data elements for which our four-step evaluation did not identify disclosure concerns and is proposing to require reporting of additional new data elements to assist the EPA's verification effort. These "inputs to equations" data elements for which reporting would be retained and these proposed new reported data elements would allow the EPA to conduct additional verification and minimize the number of follow-ups with facilities. Lastly, for the reasons specified in Section III.B of this preamble, the EPA is proposing that facilities retain records for 5 years, which would allow the EPA time to perform any necessary follow-up with reporters. For the reasons stated above, the EPA has determined that the proposed verification approach would be adequate to verify the reported emissions for reporters using "inputs to equations" data elements to calculate reported GHGs under the subparts identified in Table 2 of this preamble and is a reasonable alternative to collecting "inputs to equations" data elements for which we have identified disclosure concerns.

The EPA is proposing to require the use of the inputs verification tool starting with reporting year 2014. The inputs verification tool is designed to be used concurrently with annual reporting by facilities. By the time the EPA takes any final action on this proposed amendment, reporters would likely have already submitted annual reports for reporting years 2010 through 2013. While additional verification could be conducted on the past years' data if the inputs verification tool were used for these years, given that most of the data would likely already have been published and that the use of best available monitoring methods (BAMM) for these sectors is relatively low during these years, the EPA has determined that the added benefit does not outweigh the burden that would be required for facilities to use the inputs verification tool for years prior to reporting year 2014.

3. <u>Reporting of 440 "Inputs to Equations" Data Elements Would Not Be Necessary With the Proposed Verification Approach.</u>

The EPA is proposing to remove the reporting requirement for 440 "inputs to equations" data elements that are in the subparts listed in Table 2 of this preamble. With the proposed alternative verification approach described in Section III.A.2 of this preamble, the EPA would no longer need to rely on the collection of these "inputs to equations" data elements to verify emissions under those subparts. Not having these data elements reported would address concerns relative to potential disclosure of these data elements. These 440 data elements are specified in Table 1 of the memorandum "List of Inputs to Equations Data Elements Proposed Not To Be Reported" (refer to Docket ID No. EPA–HQ–OAR–2010-0929).

⁶For 23 of these "inputs to equations" data elements, we are proposing to remove the reporting requirement because, while there is not a disclosure concern, the EPA determined that these data elements would not be useful for data verification and would not inform future GHG policy development in the absence of other data elements for which we are proposing to remove the reporting requirement. See section III.A.3 of this preamble for additional discussion on this topic.

The 440 "inputs to equations" data elements for which the EPA is proposing to remove the reporting requirement must be maintained on-site as records. Because Part 98 already requires these "inputs to equations" data elements to be kept as records (see 40 CFR 98.3(g)(2), which states that "the data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type" must be kept as records), the EPA is not proposing in this action to specify each of the 440 "inputs to equations" data elements in the recordkeeping section of each subpart. The EPA considered whether specifying each of these "inputs to equations" data elements in the recordkeeping sections of each subpart would improve the clarity of the specific records that would be required to be retained. Because the EPA is proposing that the "inputs to equations" data elements that would not be reported must be kept as records in the format generated by the inputs verification tool (i.e., file for downloading or printing), the EPA determined that the data that must be kept as records would be sufficiently clear. The EPA seeks comment on whether additional specificity within the recordkeeping requirements of each subpart would improve the clarity of the specific records that are required to be retained.

For the purposes of clarifying which data elements must be reported for previous reporting years 2010 through 2013, we are proposing to revise Table A-7 to Subpart A to remove all 440 data elements for which reporting is proposed to be removed. The data elements that are not being removed from Table A-7 would continue to be reporting requirements, and would be reported for previous reporting years 2010 through 2013, as appropriate.

The EPA is retaining reporting of 170 "inputs to equations" data elements. Refer to Table 2 in the memorandum "List of 'Inputs to Equations' Data Elements Proposed Not To Be

⁷ These 170 "inputs to equations" data elements include nine "inputs to equations" data elements in subpart L of part 98 that are not being addressed in this rulemaking because they will be addressed in a separate action related to subpart L.

Reported" (refer to Docket ID No. EPA-HQ-OAR-2010-0929) for a complete list of these 170 data elements. The 170 "inputs to equations" data elements include certain "inputs to equations" data elements for the subparts listed in Table 3 of this preamble, as well as all "inputs to equations" data elements for subparts C (only for specified stationary fuel combustion sources connected to certain electric generators that deliver power to the local or regional electric power grid)⁸, W, and II of part 98. For these "inputs to equations" data elements, the EPA is not amending these reporting requirements and would therefore let the deferral of these data elements expire on March 31, 2015. As a result, these "inputs to equations" data elements would be reported for future reporting years starting with reporting year 2014, as well as for previous reporting years (i.e., reporting years 2010 through 2013). Based on "Step 2" of our evaluation described in Section I.B of this preamble, these data elements would not raise disclosure concerns. Having these data elements reported would allow the EPA to do additional verification, including conduct year-to-year comparisons, thereby reducing the amount of direct follow-up required with facilities. For the reason stated above, collecting these data elements, even in the absence of collecting all "inputs to equations" data elements, would aid in the verification process.

The EPA identified 23 "inputs to equations" data elements for which disclosure concerns were not identified based on "Step 2" of our evaluation; however, the EPA is not retaining these reporting requirements. The EPA determined that these 23 data elements would not be useful for data verification and would not inform future GHG policy development in the absence of other

generators is greater than or equal to 1 megawatt electric output.

⁸ Refers to stationary fuel combustion sources (e.g., individual units, aggregations of units, common pipes, or common stacks) subject to subpart C of Part 98 meeting both of the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators connected to combustion units that are subject to subpart D of this part); and (2) the stationary fuel combustion source is located at a facility for which the sum of the nameplate capacities for all such electric

"inputs to equations" data elements for which the reporting requirement is proposed to be removed under this action. Examples of these 23 "inputs to equations" include reporting the selected default molar volume conversion factor and reporting the units of measure of a site-specific emission factor. These "inputs to equations" are identified in the memorandum "List of 'Inputs to Equations' Data Elements Proposed Not To Be Reported" (refer to Docket ID No. EPA–HQ–OAR–2010-0929).

Regarding the 170 retained "inputs to equations" data elements, for reporting year 2014 and thereafter, reporters would enter the 170 "inputs to equations" data elements for which we are retaining the reporting requirement into e-GGRT. Starting in reporting year 2014, the e-GGRT system would retain these 170 data elements as part of the annual report and they would be accessible by the EPA once the reporter submits the annual report. In order to ease the burden on facilities, for reporting years prior to reporting year 2014, the EPA is proposing that these reported "inputs to equations" data elements be submitted as part of the reporting year 2014 annual report. Specifically, when reporters prepare their reporting year 2014 annual report via e-GGRT, they would be required to include these "inputs to equations" data elements for reporting year 2014 as well as for all applicable previous reporting years. The annual report, including these "inputs to equations" data elements would be submitted via e-GGRT. This approach would prevent facilities from being required to revise, re-certify, and re-submit annual reports for reporting years 2010, 2011, 2012, and 2013.

The proposed revisions to the current reporting requirements would apply to all reporters subject to the subparts listed in Table 2 of this preamble, including subpart C, and using "inputs to equations" data elements to calculate reported GHGs. However, as noted in Table 2, we are not proposing to amend the reporting requirements for stationary fuel combustion sources subject

to subpart C (e.g., individual units, aggregations of units, common pipes, or common stacks) that meet the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators that are connected to combustion units subject to subpart D); and (2) the stationary fuel combustion source is located at a facility for which the sum of nameplate capacities for all such electric generators is greater than or equal to 1 megawatt electric output. The "inputs to equations" data elements for these stationary fuel combustion sources are among those that did not raise disclosure concerns under "Step 2" of our evaluation of the "inputs to equations" data elements (refer to Section I.B of this preamble for a discussion of the EPA's four-step evaluation). Refer to the memoranda documenting "Step 2" of our evaluation, "Evaluation of Competitive Harm From Reporting 2015 Inputs to Equations" (Docket ID No. EPA–HQ–OAR–2010-0929), for further information on the results of the analysis for these stationary fuel combustion sources.

Reporters currently reporting emissions for stationary fuel combustion sources under subpart C have the option to utilize one or more of the reporting options under subpart C that allow the grouping of stationary combustion units for the purpose of monitoring, calculating, and reporting emissions. The EPA recognizes that stationary combustion units grouped in these reporting configurations could include both combustion units associated with electric generators (excluding generators connected to combustion units subject to subpart D) (connected to the grid and not connected to the grid) and combustion units not associated with electric generators (excluding generators connected to combustion units subject to subpart D). In these cases where combustion units are grouped, the EPA has determined that there would be no disclosure

concerns with reporting of "inputs to equations" data elements for the grouped combustion units. In reporting combined data for multiple units including those associated with an electric generator and subject to reporting under this proposed action, no unit-specific data would be revealed. Furthermore, should a facility not wish to disclose aggregated data, it would have the option to calculate and report emissions using one of the individual unit reporting configurations. The EPA seeks comment on this conclusion. If you believe that there are any disclosure concerns, please provide detailed information about the concern, as well as whether reporting on an individual unit basis is a feasible reporting option.

Additionally, the EPA is proposing to revise two paragraphs (40 CFR 98.116(e)(6) and 40 CFR 98.186(b)(8)) that reference other paragraphs that include "inputs to equations" data elements proposed to be removed from Part 98. As a result, we are proposing to remove the cross reference while carrying over the substantive information in order to maintain the requirements in these paragraphs.

The EPA requests comment on the proposed inputs verification tool and verification approach, and the associated revision to the current reporting requirements as described in this section.

B. Proposed Revisions to Recordkeeping Requirements

Given the proposed verification approach described in Section III.A of this preamble, the EPA considered whether the current record retention period and record format requirements would be sufficient to allow the EPA to perform data verification. We considered:

• The time we would need to follow up with reporters to further verify reported GHG emissions.

- The desirability of retaining multiple years of data records to allow for appropriate assessment of compliance and for analyses of trends for policy analysis purposes.
- The format of records, and whether the current format would be adequate for our verification process. For example, we considered whether records of "inputs to equations" data elements contained in multiple separate documents (as currently allowed under Part 98) would allow an EPA inspector to efficiently analyze the consistency of the data elements and use the data elements to perform calculations to confirm reported GHG emissions.

Because there may be more direct follow-up activities under this alternative verification approach, we are proposing to extend the record retention period from 3 to 5 years. We have determined that 5 years is reasonable given the large number of reporters under the subparts identified in Table 2 of this preamble (over 2,000 facilities) and the likely increase in follow-up activities. It would be important that relevant records are available to the EPA for follow-up activities with facilities, including on-site audits if necessary, regarding potential errors, discrepancies, or questions. Should an EPA inspector visit a facility, it would be important to be able to examine not only the current year's records but those from previous years as well, because previous years' data would provide year-to-year comparisons, which are useful for verifying the current year's data. A 5-year record retention period would ensure the availability of relevant records for the follow-up activities described above. The EPA is proposing that this 5-year record retention requirement begin with records for reporting year 2010, as discussed in Section III.A.2 of this preamble.

For reporters subject to using the proposed inputs verification tool, the EPA is proposing to extend the record retention period not only for the subparts listed in Table 2 of the preamble,

but also for other subparts that apply to reporters subject to a subpart in Table 2. Under this proposal, any such facility subject to both a subpart listed in Table 2 of this preamble and a subpart not listed in Table 2 would be required to maintain all records required under both subparts for a period of 5 years. For example, if a facility is required to use the proposed inputs verification tool under subpart C (in Table 2) and to report under subpart HH (not in Table 2), the facility would be required to maintain all records required under both subparts for 5 years. The EPA is proposing these provisions for two reasons. First, the EPA determined that during a site visit, if questions arise regarding the accuracy of an "inputs to equations" data element, it may be necessary to examine other non-input recordkeeping information, such as a monitoring plan or recordkeeping information in a different subpart, in order to fully investigate the accuracy of the data. It is necessary to ensure that all data necessary for verification are available, and this proposed 5-year record retention period would provide better assurance of on-site data availability. Second, the EPA determined that maintaining multiple sets of data records according to different record retention periods could possibly cause confusion and result in recordkeeping errors. Providing the same record retention duration for all subparts, as proposed, would simplify recordkeeping and thereby minimize the chance for recordkeeping errors.

In addition, the EPA is proposing revisions to the recordkeeping format for "inputs to equations" data elements. Currently, reporters have the option to maintain records of their "inputs to equations" data elements in one or more electronic or hard copy files. The proposed record format revision would require reporters to maintain an electronic or hard copy of the single file generated by the proposed inputs verification tool, listing all "inputs to equations" data elements entered into the tool. This proposed record format change would ensure that the EPA could readily access these data, enabling the EPA to quickly and efficiently perform calculations

and data checks during site visits. All other records required under Part 98 would be maintained in the format currently required under Part 98. In combination with the proposed reporting requirements discussed in Sections III.A and C of this preamble, these proposed recordkeeping requirements would allow the EPA to adequately verify certain reported emissions without implicating the disclosure concerns discussed in the memorandum "Evaluation of Competitive Harm For Reporting 2015 Inputs to Equations" (refer to Docket ID No. EPA–HQ–OAR–2010-0929).

In amending 40 CFR part 98, subpart A to add these recordkeeping requirements, we are also correcting an error in the current version of 40 CFR 98.3(g). In a previous action amending this paragraph (76 FR 73866, November 29, 2011), our intention was to amend the second sentence of the paragraph regarding record retention duration; however, the third sentence regarding record format was inadvertently amended. To correct this error, we are proposing to remove the second sentence of 40 CFR 98.3(g) and to reinstate the previous third sentence of 40 CFR 98.3(g) (regarding format of records).

We seek comment on whether 5 years is the appropriate timeframe for maintaining records for facilities required to use the proposed inputs verification tool under a subpart listed in Table 2 of this preamble. In addition, we seek comment on the proposal to extend the record retention period for these reporters, not only for the subparts listed in Table 2 of the preamble, but also for other subparts that apply to these reporters.

C. Proposed Requirement to Report Additional Data

As part of our proposal to no longer require reporting of certain "inputs to equations" data elements, we are proposing to require that certain reporters using the proposed inputs verification tool also report the new data elements specified in Table 4 of this preamble. These

additional data elements would allow the EPA to perform additional verification checks and minimize the number of follow-up activities. These data elements are quantities that provide information on the activity level at the facility, emission factors used, characteristics of carbon-containing streams, and other process information that would provide key information for verification, including confirming that emissions are appropriate for a given activity-level and estimating expected emissions based on data provided. These new data reporting elements would also enable the EPA to better understand the following aspects concerning reporters in order to inform future GHG policy: (1) the GHG emission profile for the reporter; (2) the relationship of GHG emissions to production output or raw material input within the industry sector; and (3) the factors influencing GHG emissions.

The EPA is proposing to add six new equations (Equations Q-9 through Q-14 of part 98) to subpart Q to specify how to calculate and report each of the six new data elements proposed to be added to subpart Q. Table 4 of this preamble specifies which equation number correlates with each new proposed data element. Refer to the proposed amendments for subpart Q for the proposed equations.

The EPA is proposing confidentiality determinations for these proposed new data elements. Those new data elements determined to be confidential business information in a final rule would be afforded confidential treatment. Refer to the following Section IV of this preamble for the EPA's proposed confidentiality determinations for the proposed new data elements.

IV. Confidentiality Determination for Proposed New Data Elements to be Reported

The EPA is proposing confidentiality determinations for each new data element listed in Table 4 of this preamble. To make these determinations, the EPA proposes to use the same

⁹ The EPA has previously stated that a goal of collecting data under the GHGRP is to inform future GHG policy (refer to the April 10, 2009 proposed rule, 74 FR 16455).

approach that the EPA previously used for the 2011 final CBI rule (76 FR 30782, May 26, 2011). Specifically, the EPA is proposing to assign each new data element listed in Table 4 of this preamble to one of 11 direct emitter data categories, based on the type and characteristics of the data element. For a description of each data category and the type and characteristics of data elements assigned to each category, see Sections II.C and II.D of the July 7, 2010 CBI proposal preamble (75 FR 39106 – 39130).

Based on its evaluation of the new data elements, the EPA is proposing that each new data element be assigned to one of the four following direct emitter data categories:

- Production/Throughput Data that are Not Inputs to Emission Equations.
- Raw Materials Consumed that are Not Inputs to Emission Equations.
- Unit/Process "Static" Characteristics that are Not Inputs to Emission Equations.
- Unit/ Process Operating Characteristics that are Not Inputs to Emission Equations.

In the 2011 final CBI rule (May 26, 2011, 76 FR 30782), the EPA made categorical determinations that all data elements assigned to the "Production/Throughput Data that are Not Inputs to Emission Equations" and "Raw Materials Consumed that are Not Inputs to Emission Equations" data categories are entitled to confidential treatment because the data do not meet the definition of "emission data" in 40 CFR 2.301(a)(2)(i) and they are CBI.

The EPA is proposing that seven new data elements be assigned to the "Production/Throughput Data that are Not Inputs to Emission Equations" data category and 10 new data elements be assigned to the "Raw Materials Consumed that are Not Inputs to Emission Equations" data category, as shown in Table 5 of this preamble, thereby applying the categorical confidentiality determinations made for these categories in the 2011 final CBI rule (i.e., they are

CBI) to the proposed new reporting elements assigned to these categories. This proposal is not changing, nor soliciting comment on, the categorical confidentiality determination for these two data categories. Should the EPA finalize the category assignment for these data elements, all new data elements assigned to these categories would be considered to be entitled to confidential treatment.

Table 5. Data Elements Proposed to Be Assigned To the "Production/Throughput Data that are Not Inputs to Emission Equations" and "Raw Materials Consumed that are Not Inputs to Emission Equations" Data Categories

Subpart	Proposed Citation	Data Element		
"Production/Throughput Data that are Not Inputs to Emission Equations" Data Category				
G - Ammonia Production	40 CFR 98.76(b)(14)	Annual ammonia production (metric tons).		
	40 CFR 98.76(b)(15)	Annual methanol production (metric tons), if this quantity is not reported under subpart X.		
H - Cement Kilns	40 CFR 98.86(b)(16)	Annual clinker production (metric tons).		
P – Hydrogen Production	40 CFR 98.166(e)	Annual methanol production (metric tons), if this quantity is not reported under subpart X.		
S - Lime Manufacturing	40 CFR 98.196(b)(18)	Annual quantity (metric tons) of lime product sold, by type.		
X – Petrochemical	40 CFR 98.246(a)(13) and (b)(10)	If using the mass balance method or CEMS method to calculate GHG emissions: Name and annual quantity (in metric tons) of each carboncontaining co-product.		
AA - Pulp and Paper	40 CFR 98.276(l)(1)	For each pulp mill lime kiln: Quantity of calcium oxide (CaO) produced (metric tons).		
"Raw Materials Con	sumed that are Not Inputs to Em	nission Equations" Data Category		
E - Adipic Acid Production	40 CFR 98.56(m)	Annual quantity of cyclohexane fed to all production lines, combined (metric tons).		
P - Hydrogen Production	40 CFR 98.166(b)(7)	Name and annual quantity (metric tons) of each carbon-containing fuel and feedstock.		

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Subpart	Proposed Citation	Data Element
Q - Iron and Steel	40 CFR 98.176(e)(6)(i)	If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The annual mass (metric tons) of all gaseous, liquid, and solid fuels (combined) used in process units specified in Equations Q-1 through Q-7, calculated as specified in a new Equation Q-9 of subpart Q in the proposed rule amendments. Does not include fuel used in a stationary combustion unit where emissions are reported under
	40 CFR 98.176(e)(6)(ii)	subpart C. If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The annual mass (metric tons) of all non-fuel material inputs (combined) specified in Equations Q-1 through Q-7 of subpart Q, calculated as specified in a new Equation Q-10 of subpart Q in the proposed rule amendments.
	40 CFR 98.176(e)(6)(iii)	If you use the carbon mass balance method in 40 CFR 98.173(b)(1) to determine CO ₂ emissions: The annual mass (metric tons) of all solid and liquid products and byproducts (combined) specified in Equations Q-1 through Q-7, calculated as specified in a new Equation Q-11 of subpart Q in the proposed rule amendments.

Subpart	Proposed Citation	Data Element
•	40 CFR 98.176(e)(6)(iv)	If you use the carbon mass
		balance method in 40 CFR
		98.173(b)(1) to determine CO ₂
		emissions: The weighted
		average carbon content of all
		gaseous, liquid, and solid fuels
		(combined) included in
		Equation Q-9 of subpart Q,
		calculated as specified in a new
		Equation Q-12 of subpart Q in
		the proposed rule amendments.
	40 CFR 98.176(e)(6)(v)	If you use the carbon mass
		balance method in 40 CFR
		98.173(b)(1) to determine CO ₂
		emissions: The weighted
		average carbon content of all
		non-fuel inputs to all furnaces
		(combined) included in
		Equation Q-10 of subpart Q,
		calculated as specified in a new
		Equation Q-13 of subpart Q in
		the proposed rule amendments.
	40 CFR 98.176(e)(6)(vi)	If you use the carbon mass
	10 0110 50:17 0(0)(0)(11)	balance method in 40 CFR
		98.173(b)(1) to determine CO ₂
		emissions: The weighted
		average carbon content of all
		solid and liquid products and
		byproducts from all furnaces
		(combined) included in a new
		Equation Q-11 of subpart Q in
		the proposed rule amendments,
		calculated as specified in new
		Equation Q-14 of subpart Q in
		the proposed rule amendments.
X – Petrochemical	40 CFR 98.246(a)(12) and (b)(9)	If using the mass balance
	(b)(3)	method or CEMS method to
		,
		calculate GHG emissions: Name and annual quantity (in metric tons) of each carboncontaining feedstock.

Subpart	Proposed Citation	Data Element
AA - Pulp and Paper	40 CFR 98.276(m)(1)	For each chemical recovery
		furnace and chemical recovery
		combustion unit for which you
		are not using Equation C-2c of
		subpart C to calculate CO ₂
		emissions: Annual mass of
		steam generated (lb steam),
		individually for each fossil fuel
		type and for spent liquor solids.

The EPA is proposing to assign eight proposed new data elements to the "Unit Process Operating Characteristics that are Not Inputs to Emission Equations" category and one proposed new data element to the "Unit/Process Static Characteristics that are Not Inputs to Emission Equations" category. In the 2011 final CBI rule, the EPA determined that the data elements in these categories are not "emission data" (as defined at 40 CFR 2.301(a)(2)(i)). However, instead of categorical determinations, the EPA made confidentiality determinations for individual data elements assigned to these two categories. In proposing these determinations, the EPA considered the confidentiality criteria at 40 CFR 2.208, in particular whether release of the data is likely to cause substantial harm to the business's competitive position. See 40 CFR 2.208(e)(1). The EPA is therefore following the same approach in this action for the proposed new reporting elements assigned to these two categories.

Table 6 of this preamble lists the data elements the EPA proposes to assign to these two data categories and presents the EPA's rationale for proposing to determine that each does or does not qualify as CBI under CAA section 114(c).

Table 6. Proposed Confidentiality Determinations for Proposed New Data Elements Assigned to the "Unit/Process Operating Characteristics That Are Not Inputs to Emission Equations" and "Unit/Process 'Static' Characteristics that Are Not Inputs to Emission Equations" Data Categories

		Data	Confidentiality	Proposed Rationale for
Subpart	Citation	Element	Determination	Confidentiality Determination

Subpart	Citation	Data Element	Confidentiality Determination	Proposed Rationale for Confidentiality Determination
"Uni	t/Process Operation	ng Characteristics	That Are Not Inputs	s to Emission Equations" Data
Category				
E – Adipic Acid Production	40 CFR 98.56(n)	Annual percent N ₂ O emission reduction for all production units combined.	Not CBI	The annual facility percent N ₂ O reduction could not be used to calculate adipic acid production. The level of N ₂ O reductions varies by the type of abatement technology, the environment in which the abatement technology is operating, the age of the abatement technology, the age of the catalyst used, and the maintenance level of the abatement technology.
H - Cement Kilns	40 CFR 98.86(b)(17)	Annual average clinker CO ₂ emission factor for the facility, averaged across all kilns (metric tons CO ₂ /metric ton clinker produced).	CBI	This data element could be used to back calculate a facility's clinker production data, which would result in competitive disadvantage.
	40 CFR 98.86(b)(18)	Annual average cement kiln dust (CKD) CO ₂ emission factor for the facility, averaged across all kilns (metric tons CO ₂ /metric ton CKD produced).	СВІ	This data element could provide information about the efficiency of the operation, which would result in competitive disadvantage.
V – Nitric Acid Production	40 CFR 98.226(q)	Annual percent N ₂ O emission reduction for all production	Not CBI	The annual facility percent N ₂ O reduction for all nitric acid production trains combined could not be used to calculate the nitric acid production value for

		Data	Confidentiality	Proposed Rationale for
Subpart	Citation	Element	Determination	Confidentiality Determination
Subpart	Citation	units combined.	Determination	any individual facility. The level of N ₂ O reductions for each individual facility varies by the type of abatement technology, the environment in which the abatement technology is operating, the age of the abatement technology, the age of the catalyst used, and the maintenance level of the abatement technology. Additionally, facility-level N ₂ O emission reduction information is already publicly available (see docket number EPA-HQ-OAR-2010-0750 and
				http://www.climateactionreserve.
Y – Petroleum Refineries	40 CFR 98.256(e)(11)(i)	Annual quantity of flare gas combusted (in MMscf per year) (only when using Equation Y-3 of subpart Y).	Not CBI	org). This data element does not reveal (nor could be used to calculate) details regarding product characteristics, actual production data, or operating efficiency. It does not provide information that would allow competitors to infer market share, production costs, or pricing structures and thus gain a competitive advantage. The EPA applied the same rationale in the 2010 proposed and 2011 final CBI rules (75 FR 39113, July 7, 2010; and 76 FR 30803 - 30806, May 26, 2011), in support of a non-CBI determination for reporting of the following same data element currently required to be reported if a different equation (Equation Y-1a) is used: annual volume of flare gas combusted (scf/year) under 40 CFR 98.256(e)(6).
	40 CFR 98.256(e)(11)(ii)	Annual average molecular weight of flare gas combusted (in mmBtu per MMscf)	Not CBI	This data element does not reveal (nor could be used to calculate) details regarding product characteristics, actual production data, or operating efficiency. It does not provide information that would allow competitors to infer market share, production costs, or

		Data	Confidentiality	Proposed Rationale for
Subpart	Citation	Element	Determination	Confidentiality Determination
Subpart	Citation	(only when using Equation Y-3 of subpart Y).	Determination	pricing structures and thus gain a competitive advantage. The EPA applied the same rationale in the 2010 proposed and 2011 final CBI rules (75 FR 39113, July 7, 2010; and 76 FR 30803 – 30806, May 26, 2011), in support of a non-CBI determination for reporting of the following same data element currently required to be reported if a different equation (Equation Y-1a of subpart Y) is used: annual average molecular weight of the flare gas (kg/kg-
	40 CFR 98.256(e)(11)(iii)	Annual average carbon content of flare gas combusted (expressed as a decimal fraction)(only when using Equation Y-3 of subpart Y).	Not CBI	mole) under 40 CFR 98.256(e)(6). This data element does not reveal (nor could be used to calculate) details regarding product characteristics, actual production data, or operating efficiency. It does not provide information that would allow competitors to infer market share, production costs, or pricing structures and thus gain a competitive advantage. The EPA applied the same rationale in the 2010 proposed and 2011 final CBI rules (75 FR 39113, July 7, 2010; and 76 FR 30803 - 30806, May 26, 2011), in support of a non-CBI determination for reporting of the following same data element currently required to be reported if a different equation (Equation Y-1a of subpart Y) is used: annual average carbon content of the flare gas (kg carbon/kg flare gas) under 40 CFR 98.256(e)(6).
AA - Pulp and Paper	40 CFR 98.276(1)(2)	For each pulp mill lime kiln: Percent of annual heat input, individually for each fossil fuel type.	Non-CBI	Release of this data would not result in competitive harm because lime kiln fossil fuel use as a fraction of design heat input was reported to the EPA as part of a 2011 ICR survey, and facilities reporting via the survey made no CBI claims regarding fuel type and percent of design heat input.

¹ ND = No determination is being proposed.

The EPA is requesting comment on two aspects of these confidentiality determinations.

First, the EPA seeks comment on the proposed data category assignment for each of these data elements in Tables 5 and 6 of this preamble. If you believe that the EPA has improperly assigned any proposed new data elements to one of the data categories, please provide specific comments identifying which proposed new data elements may be mis-assigned along with a detailed explanation of why you believe them to be incorrectly assigned and in which data category you believe they best belong.

Second, for those data elements included in Table 6 of this preamble and assigned to the two direct emitter data categories without categorical confidentiality determinations, the EPA seeks comment on the individual confidentiality determinations we are proposing for these data elements. If you comment on this issue, please provide specific comment along with detailed rationale and supporting information on whether such data element does or does not qualify as CBI.

V. Impacts of the Proposed Rule

This section examines the cost impacts of the proposed rulemaking. A detailed discussion of the impacts may be found in the memorandum, "Assessment of Cost Impacts of 2015 Inputs Proposal – Revisions to Reporting, Recordkeeping, and Verification Requirements under the Greenhouse Gas Reporting Program," available in EPA docket ID No. EPA–HQ–OAR–2010-0929.

A. <u>How were the costs of this proposed rule estimated?</u>

1. Proposed Inputs Verification Tool.

The data elements required to be used for calculating the annual GHG emissions values and the cost associated with collecting these data have not changed from the estimate made during the original rulemaking process. The time associated with entry of these "inputs to equations" data elements into e-GGRT (including into the new inputs verification tool) is expected to be equivalent to the time originally anticipated for data entry. Prior to the inputs verification tool, as currently required, reporters must use their own calculation tool (e.g., calculator, calculation software) to calculate the annual GHG emissions values, using the same sets of equations and entering the same data elements that they would enter into the tool.

The EPA does recognize however that there may be some time associated with learning the new procedures for the inputs verification tool and we have estimated a cost of approximately \$66 per facility, or \$379,000 for the first year for all affected facilities. During their first session using the proposed inputs verification tool, reporters would need to spend approximately 1 hour becoming familiar with how the tool operates within e-GGRT. The proposed new requirement to use the inputs verification tool would not result in any change in the respondent activity of entering these data into e-GGRT. Once the reporter has become familiar with the tool, EPA does not anticipate any additional burden. The cost includes technical, clerical, and managerial labor hours. For further information about this cost estimate, refer to the memorandum "Assessment of Cost Impacts of 2015 Inputs Proposal – Revisions to Reporting, Recordkeeping, and Verification Requirements under the Greenhouse Gas Reporting Program" and the supporting statement for this proposed information collection request, "Supporting Statement, Environmental Protection Agency: Revisions to Reporting and Recordkeeping Requirements, and Proposed Confidentiality Determinations under the Greenhouse Gas Reporting Program, OMB control number 2060-0629, ICR number 2300.12," both available in docket EPA-HQ-OAR-2010-0929.

2. Proposed New Data Elements.

We are proposing to add 26 new data elements that were not previously required to be reported under Part 98 (see Section II.D of this preamble for further discussion of this proposed amendment), to be reported by facilities in certain subparts that are required to use the proposed inputs verification tool. Of these 26 data elements, nine data elements are related to annual production or raw material usage, which are collected by a facility as a routine part of conducting business. For these data elements, we are not proposing that reporters comply with specific data

collection or monitoring requirements beyond the methods commonly used for accounting purposes. The other 17 data elements proposed to be reported are calculated values using data currently required to be collected to perform emissions calculations. For all of these additional data elements, the EPA has estimated a nominal additional cost to report the data element and fulfill the recordkeeping requirements. The total costs associated with reporting and recordkeeping for the 26 data elements in 10 subparts is \$80,000. These costs represent the cost for all affected facilities in the first year.

B. Additional Impacts of the Proposed Amendments

The proposed confidentiality determinations for the new data elements would not affect whether and how data are reported and, therefore, would not impose any additional burden on sources.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because this action raises novel legal or policy issues arising out of legal mandates, the President's priorities, or principles set forth in the executive order. Accordingly, the EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. The Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR number 2300.12.

This action proposes to amend reporting and recordkeeping requirements and verification procedures for the GHGRP. In addition, the EPA is proposing confidentiality determinations for the proposed new data elements in this action. The proposed amendments to the reporting requirements in the source category-specific subparts are not anticipated to result in significant burden for reporters. The new data elements required to be reported are expected to be readily available for affected facilities, or easily calculated using data already required to be collected (e.g., a monthly value is currently reported and an annual value is proposed to be reported).

Impacts associated with the proposed changes to the reporting requirements in each subpart are detailed in the memorandum "Assessment of Cost Impacts of 2015 Inputs Proposal – Revisions to Reporting, Recordkeeping, and Verification Requirements under the Greenhouse Gas Reporting Program" (see Docket ID No. EPA-HQ-OAR-2010-0929). Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, the EPA has established a public docket for this rule, which includes this ICR, under Docket ID number EPA-HQ-OAR-2010-0929. Submit any comments related to this ICR to the EPA and the OMB. See

the ADDRESSES section at the beginning of this notice for where to submit comments to the EPA. Send comments to the OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Since the OMB is required to make a decision concerning this ICR between 30 and 60 days after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], a comment to OMB is best assured of having its full effect if OMB receives the comment by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Act (RFA)

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's proposed rule amendments on small entities, small entity is defined as: (1) a small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. After considering the economic impacts of today's proposed amendments on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The small

entities directly regulated by these proposed rule amendments include small businesses across all sectors of the economy encompassed by Part 98, small governmental jurisdictions, and small non-profits. We have determined that these facilities will experience impacts of roughly a first-year cost of \$66 per facility for learning new procedures for the verification tool and an annual cost of \$100 per facility for the recordkeeping and reporting of 26 new data elements.

Although these proposed rule amendments will not have a significant economic impact on a substantial number of small entities, the EPA nonetheless has tried to reduce the impact of this rule on small entities. The EPA supports a "help desk" for the GHGRP, which would be available to answer questions on the provisions in this rulemaking.

We continue to be interested in the potential impacts of the proposed rule amendments on small entities and welcome comments on issues related to such impacts.

D. <u>Unfunded Mandates Reform Act (UMRA)</u>

The proposed amendments and confidentiality determinations do not contain a federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. This action proposes: (1) requirements for certain reporters under 24 subparts to use an EPA-provided inputs verification tool instead of reporting certain data elements for which disclosure concerns have been identified, (2) lengthening the record retention time for reporters required to use the inputs verification tool, and (3) new data elements to be reported for certain reporters using the inputs verification tool and confidentiality determinations for these new data element. As discussed in section V of this preamble, for the first year, the total collective impact on regulated entities is: (1) \$379,000, or \$66 per entity, for using the inputs verification tool; and (2) \$80,000, or \$103 per entity, for the proposed new data elements to be reported. Thus, the proposed amendments

and confidentiality determinations are not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. This action proposes to amend reporting and recordkeeping requirements and verification procedures for certain reporters in the GHGRP. In addition, the EPA is proposing confidentiality determinations for the proposed new data elements in this action. As discussed in section V of this preamble, the total collective impact on regulated entities is \$459,000 in the first year, and \$80,000 annually thereafter. Because this impact on each individual facility is estimated to be approximately \$66 - \$169 in the first year and \$103 annually thereafter, the EPA has determined that the provisions in this action would not significantly impact small governments. In addition, because none of the provisions apply specifically to small governments, the EPA has determined that the provisions in this action would not uniquely impact small governments. Therefore, this action is not subject to the requirements of section 203 of the UMRA.

E. Executive Order 13132: Federalism

The action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The proposed amendments and confidentiality determinations apply to facilities that directly emit greenhouses gases and fuel and chemicals suppliers. These proposed changes do not apply to governmental entities unless the government entity owns a facility that directly emits GHGs above threshold levels (such as a large stationary

combustion device), so relatively few government facilities would be affected. Moreover, for government facilities that are subject to the rule, the proposed revisions will not have a significant cost impact. This proposed action also does not limit the power of states or localities to collect GHG data and/or regulate GHG emissions. Thus, Executive Order 13132 does not apply to this rule.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between the EPA and State and local governments, the EPA specifically solicits comments on this proposed action from State and local officials.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments.

This proposed action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). The proposed amendments and confidentiality determinations apply directly to facilities that directly emit greenhouses gases or that are suppliers of GHGs. They would not have tribal implications unless the tribal entity owns a facility that directly emits GHGs above threshold levels (such as a landfill or large combustion device). Relatively few tribal facilities would be affected. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This proposed action is not subject to Executive Order 13045 because it does not establish an environmental standard intended to mitigate health or safety risks.

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use

This proposed action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Part 98 relates to monitoring, reporting, and recordkeeping and does not impact energy supply, distribution, or use. This action proposes to amend reporting and recordkeeping requirements and verification procedures for the GHGRP. In addition, the EPA is proposing confidentiality determinations for the proposed new data elements in this action. These proposed amendments and confidentiality determinations do not make any changes to the existing monitoring, recordkeeping, or reporting requirements under Part 98 that affect the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law No. 104-113, 12(d) (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking does not involve any new technical standards. Therefore, the EPA is not considering the use of any voluntary consensus standards.

J. <u>Executive Order 12898: Federal Actions to Address Environmental Justice in Minority</u>

<u>Populations and Low-Income Populations</u>

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

The EPA has determined that these proposed rule amendments will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because the amendments do not affect the level of protection provided to human health or the environment. This is because the proposed amendments address information collection and reporting and verification procedures.

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List of Subjects 40 CFR Part 98

Environmental protection, Administrative practice and procedure, Greenhouse gases, Reporting and recordkeeping requirements.

Dated: August 29, 2013

Gina McCarthy, Administrator.

For the reasons stated in the preamble, title 40, chapter I, of the Code of Federal Regulations is proposed to be amended as follows:

PART 98—MANDATORY GREENHOUSE GAS REPORTING

1. The authority citation for part 98 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart A—[AMENDED]

2. Section 98.3 is amended by revising paragraphs (c)(4)(vii), (d)(3)(v), (g) introductory text, and (g)(2)(i) to read as follows:

§ 98.3 What are the general monitoring, reporting, recordkeeping and verification requirements of this part?

* * * * *

- (c) * * *
- (4) * * *

(vii) The owner or operator of a facility is not required to report the data elements specified in Table A-6 to this subpart for calendar years 2010 through 2011 until March 31, 2013. The owner or operator of a facility is not required to report the data elements specified in Table A-7 to this subpart for calendar years 2010 through 2013 until March 31, 2015. Data elements specified in Table A-7 to this subpart for calendar years 2010 through 2013 must be submitted as part of the annual report for reporting year 2014.

* * * * *

- (d) * * *
- (3) * * *

(v) For each stationary fuel combustion source that that meets the criteria specified in § 98.36(f) of this part, report any facility operating data or process information used for the GHG emission calculations.

* * * * *

(g) Recordkeeping. An owner or operator that is required to report GHGs under this part must keep records as specified in this paragraph. Except as otherwise provided in this paragraph, retain all required records for at least 3 years from the date of submission of the annual GHG report for the reporting year in which the record was generated. The records shall be kept in an electronic or hard-copy format (as appropriate) and recorded in a form that is suitable for expeditious inspection and review. If a reporter is required under § 98.5(b) to use software specified by the Administrator to enter data to calculate the reported GHGs, all records required under Part 98 must be retained by the reporter for 5 years from the date of submission of the annual GHG report for the reporting year in which the record was generated. Upon request by the Administrator, the records required under this section must be made available to EPA. Records may be retained off site if the records are readily available for expeditious inspection and review. For records that are electronically generated or maintained, the equipment or software necessary to read the records shall be made available, or, if requested by EPA, electronic records shall be converted to paper documents. You must retain the following records, in addition to those records prescribed in each applicable subpart of this part:

* * * * *

(2) * * *

(i) The GHG emissions calculations and methods used. For data required by § 98.5(b) to be entered into the software specified by the Administrator, maintain the entered data in the format generated by the software specified by the Administrator.

* * * * *

3. Section 98.5 is revised to read as follows:

§ 98.5 How is the report submitted?

- (a) Each GHG report and certificate of representation for a facility or supplier must be submitted electronically in accordance with the requirements of § 98.4 and in a format specified by the Administrator.
- (b) For reporting year 2014 and thereafter, you must enter into verification software specified by the Administrator the data used as inputs to the calculation methods specified in Table A-8 to Part 98, excluding data required to be reported in the reporting section of each subpart listed in Table A-8 to Part 98.
 - 4. Table A-7 to Subpart A of Part 98 is revised to read as follows:

Table A-7 to Subpart A of Part 98—Data Elements That Are Inputs to Emission Equations and for Which the Reporting Deadline Is March 31, 2015

Subpart	Rule citation (40 CFR part 98)	Specific data elements for which reporting date is March 31, 2015 ("All" means all data elements in the cited paragraph are not required to be reported until March 31, 2015)
A	98.3(d)(3)(v)	All.
С	98.36(b)(9)(iii)	Only estimate of the heat input. ¹
С	98.36(c)(2)(ix)	Only estimate of the heat input from each type of fuel listed in Table C–2. ¹
С	98.36(e)(2)(i)	A11.1
С	98.36(e)(2)(ii)(A)	A11.1

Subpart	Rule citation (40 CFR part 98)	Specific data elements for which reporting date is March 31, 2015 ("All" means all data elements in the cited paragraph are not required to be reported until March 31, 2015)
С	98.36(e)(2)(ii)(C)	Only HHV value for each calendar month in which HHV determination is required. ¹
C	98.36(e)(2)(ii)(D)	All. ¹
C	98.36(e)(2)(iv)(A)	All. ¹
C	98.36(e)(2)(iv)(C)	All. ¹
C	98.36(e)(2)(iv)(F)	All. ¹
C	98.36(e)(2)(ix)(D)	All. ¹
C	98.36(e)(2)(ix)(E)	All. ¹
C	98.36(e)(2)(ix)(F)	All. ¹
Е	98.56(g)	All.
Е	98.56(h)	All.
Е	98.56(j)(4)	All.
E	98.56(j)(5)	All.
Е	98.56(j)(6)	All.
Е	98.56(1)	All.
Н	98.86(b)(11)	All.
Н	98.86(b)(13)	Name of raw kiln feed or raw material.
L	98.126(b)(10)	All.
L	98.126(b)(11)	All.
L	98.126(b)(12)	All.
О	98.156(d)(2)	All.
О	98.156(d)(3)	All.
О	98.156(d)(4)	All.
Q	98.176(f)(1)	All.
V	98.226(i)	All.
V	98.226(j)	All.
V	98.226(m)(4)	All.

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Subpart	Rule citation (40 CFR part 98)	Specific data elements for which reporting date is March 31, 2015 ("All" means all data elements in the cited paragraph are not required to be reported until March 31, 2015)
V	98.226(m)(5)	All.
V	98.226(m)(6)	All.
V	98.226(p)	All.
W	98.236(c)(1)(i)	All.
W	98.236(c)(1)(ii)	All.
W	98.236(c)(1)(iii)	All.
W	98.236(c)(2)(i)	All.
W	98.236(c)(3)(i)	All.
W	98.236(c)(3)(ii)	All.
W	98.236(c)(3)(iii)	All.
W	98.236(c)(4)(i)(A)	All.
W	98.236(c)(4)(i)(B)	All.
W	98.236(c)(4)(i)(C)	All.
W	98.236(c)(4)(i)(D)	All.
W	98.236(c)(4)(i)(E)	All.
W	98.236(c)(4)(i)(F)	All.
W	98.236(c)(4)(i)(G)	All.
W	98.236(c)(4)(i)(H)	All.
W	98.236(c)(4)(ii)(A)	All.
W	98.236(c)(5)(iii)	All.
W	98.236(c)(5)(iv)	All.
W	98.236(c)(5)(v)	All.
W	98.236(c)(6)(i)(B)	All.
W	98.236(c)(6)(i)(D)	All.
W	98.236(c)(6)(i)(E)	All.
W	98.236(c)(6)(i)(F)	All.
W	98.236(c)(6)(ii)(A)	All.

Subpart	Rule citation (40 CFR part 98)	Specific data elements for which reporting date is March 31, 2015 ("All" means all data elements in the cited paragraph are not required to be reported until March 31, 2015)
W	98.236(c)(6)(ii)(B)	All.
W	98.236(c)(7)(i)	All.
W	98.236(c)(8)(i)(B)	All.
W	98.236(c)(8)(i)(C)	All.
W	98.236(c)(8)(i)(F)	All.
W	98.236(c)(8)(ii)(A)	All.
W	98.236(c)(8)(ii)(D)	All.
W	98.236(c)(8)(iii)(A)	All.
W	98.236(c)(8)(iii)(D)	All.
W	98.236(c)(8)(iii)(E)	All.
W	98.236(c)(10)(ii)	All.
W	98.236(c)(10)(iii)	All.
W	98.236(c)(11)(ii)	All.
W	98.236(c)(12)(ii)	All.
W	98.236(c)(12)(iii)	All.
W	98.236(c)(12)(v)	All.
W	98.236(c)(13)(i)(B)	All.
W	98.236(c)(13)(i)(E)	All.
W	98.236(c)(13)(i)(F)	All.
W	98.236(c)(13)(ii)(A)	All.
W	98.236(c)(13)(ii)(B)	All.
W	98.236(c)(13)(iii)(A)	All.
W	98.236(c)(13)(iii)(B)	All.
W	98.236(c)(13)(v)(A)	All.
W	98.236(c)(14)(i)(B)	All.
W	98.236(c)(14)(ii)(A)	All.
W	98.236(c)(14)(ii)(B)	All.

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Subpart	Rule citation (40 CFR part 98)	Specific data elements for which reporting date is March 31, 2015 ("All" means all data elements in the cited paragraph are not required to be reported until March 31, 2015)
W	98.236(c)(14)(iii)(A)	All.
W	98.236(c)(14)(iii)(B)	All.
W	98.236(c)(14)(v)(A)	All.
W	98.236(c)(15)(i)(A)	All.
W	98.236(c)(15)(i)(B)	All.
W	98.236(c)(15)(ii)(A)	All.
W	98.236(c)(15)(ii)(B)	All.
W	98.236(c)(16)(i)	All.
W	98.236(c)(16)(ii)	All.
W	98.236(c)(16)(iii)	All.
W	98.236(c)(16)(iv)	All.
W	98.236(c)(16)(v)	All.
W	98.236(c)(16)(vi)	All.
W	98.236(c)(16)(vii)	All.
W	98.236(c)(16)(viii)	All.
W	98.236(c)(16)(ix)	All.
W	98.236(c)(16)(x)	All.
W	98.236(c)(16)(xi)	All.
W	98.236(c)(16)(xii)	All.
W	98.236(c)(16)(xiii)	All.
W	98.236(c)(16)(xiv)	All.
W	98.236(c)(17)(ii)	All.
W	98.236(c)(17)(iii)	All.
W	98.236(c)(17)(iv)	All.
W	98.236(c)(18)(i)	All.
W	98.236(c)(18)(ii)	All.
W	98.236(c)(19)(iv)	All.

Subpart	Rule citation (40 CFR part 98)	Specific data elements for which reporting date is March 31, 2015 ("All" means all data elements in the cited paragraph are not required to be reported until March 31, 2015)
W	98.236(c)(19)(vii)	All.
Y	98.256(h)(5)	Only value of the correction.
Y	98.256(k)(4)	Only mole fraction of methane in coking gas.
Y	98.256(n)(3)	All (if used in Equation Y–21 to calculate emissions from equipment leaks).
Y	98.256(o)(4)(vi)	Only tank-specific methane composition data and gas generation rate data.
AA	98.276(e)	All.
CC	98.296(b)(10)(i)	All.
CC	98.296(b)(10)(ii)	All.
CC	98.296(b)(10)(iii)	All.
CC	98.296(b)(10)(iv)	All.
CC	98.296(b)(10)(v)	All.
CC	98.296(b)(10)(vi)	All.
II	98.356(d)(2)	All (if conducting weekly sampling).
II	98.356(d)(3)	All (if conducting weekly sampling).
II	98.356(d)(4)	Only weekly average temperature (if conducting weekly sampling).
II	98.356(d)(5)	Only weekly average moisture content (if conducting weekly sampling).
II	98.356(d)(6)	Only weekly average pressure (if conducting weekly sampling).

Required to be reported only by stationary fuel combustion sources (e.g., individual units, aggregations of units, common pipes, or common stacks) subject to subpart C of this part that meet both of the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators that are connected to combustion units subject to subpart D of this part); and (2) the stationary fuel combustion source is located at a facility for which the sum of the nameplate capacities for all such electric generators is greater than or equal to 1 megawatt electric output.

5. Table A-8 to Subpart A of Part 98 is added to read as follows:

Table A–8 to Subpart A of Part 98—Calculation Methods For Which Inputs To the Calculation Methods Must be Entered Into Verification Software Specified By the Administrator.

Subpart	Calculation Method (Equation Number in 40 CFR Part 98 or Description of Method)
Subpart C ¹	C-1, C-1a, C-1b, C-2b, C-2c, C-3, C-4, C-5, C-8, C-8a, C-8b, C-10, C-13, the
_	calculation method specified in § 98.3(d)(3)(iv) of subpart A
Subpart E	E-1, E-2, E-3a, E-3b, E-3c, E-3d
Subpart F	F-2 (including the method for calculating the anode effect minutes per cell-day (AEM) and slope coefficients (SCF4), F-3 (including the method for calculating the overvoltage factor (EFCF4)), F-5, F-6, F-7, F-8
Subpart G	G-1, G-2, G-3
Subpart H	H-2 (including the method in § 98.84(d) of subpart H for calculating the quantity of clinker produced), H-3, H-4, H-5
Subpart K	K-1, K-3
Subpart L	L-1, L-2, L-3, L-4, L-6, L-7, L-8, L-17, L-18, L-20, L-21, L-22, L-23, L-25, L-26, L-27, L-31, L-34
Subpart N	N-1
Subpart O	O-3, O-4, O-8, O-9 (including the calculation method specified in § 98.154(l)(2) of subpart O)
Subpart P	P-1, P-2, P-3
Subpart Q	Q-1, Q-2, Q-3, Q-4, Q-5, Q-6, Q-7, the calculation methods specified in § 98.173(b)(2)(iii), (b)(2)(iv), and (c) of subpart Q
Subpart R	R-1
Subpart S	S-1, S-2, S-3, S-4 (including the calculation method specified in § 98.194(a)
Subpart U	U-1, U-2
Subpart V	V-2, V-3a, V-3b, V-3c, V-3d
Subpart X	X-1, X-2, X-3, C-8
Subpart Y	Y-1a, Y-1b, Y-3, Y-4, Y-6, Y-8, Y-11, Y-12 (including the method for correcting the calculation, if applicable, as specified in § 98.253(f)(5)), Y-13, Y-14, Y-15, Y-16a, Y-16b, Y-17, Y-18, Y-19, Y-20, Y-22, Y-23, the methods for calculating emissions from coke burn-off specified in § 98.253(c)(4) and (5) (alternatives to using Equations Y-9 and Y-10 of Part 98), the calculation method specified in § 98.253(n) of subpart Y
Subpart Z	Z-1a, Z-1b
Subpart AA	C-1, C-1a, C-1b, C-2a, C-3, C-4, C-5, C-8, C-8a, C-8b, C-9a, AA-1, AA-2, AA-3
Subpart BB	BB-1, BB-2
Subpart CC	CC-1, CC-2
Subpart EE	EE-2
Subpart GG	GG-1
Subpart TT	TT-2, TT-3

¹ Does not apply to any stationary fuel combustion sources (e.g., individual units, aggregations of units, common pipes, or common stacks) subject to subpart C of this part that meet both of the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit

connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators that are connected to combustion units subject to subpart D of this part); and (2) the stationary fuel combustion source is located at a facility for which the sum of the nameplate capacities for all such electric generators is greater than or equal to 1 megawatt electric output.

Subpart C—[AMENDED]

- 6. Section 98.36 is amended by:
- a. Revising paragraph (a);
- b. Revising paragraph (b)(9)(iii) and adding paragraph (b)(9)(iv);
- c. Revising paragraph (c)(2)(ix) and adding paragraph (c)(2)(x);
- d. Revising paragraphs (e)(2)(i), (e)(2)(ii)(A), (e)(2)(ii)(C), and (e)(2)(ii)(D); and adding paragraph (e)(2)(ii)(E); and
- e. Revising paragraphs (e)(2)(iv)(A), (e)(2)(iv)(C), (e)(2)(iv)(F), (e)(2)(ix)(D),
 (e)(2)(ix)(E) and (e)(2)(ix)(F); and adding paragraph (f).

The revisions and additions read as follows:

§ 98.36 Data reporting requirements.

* * * * *

(a) In addition to the facility-level information required under §98.3, the annual GHG emissions report shall contain the unit-level or process-level data specified in paragraphs (b) through (f) of this section, as applicable, for each stationary fuel combustion source (e.g., individual unit, aggregation of units, common pipe, or common stack).

- (b) * * *
- (9) * * *

- (iii) The annual CH_4 and N_2O emissions for each type of fuel listed in Table C–2 of this subpart that was combusted in the unit during the report year, expressed in metric tons of each gas and in metric tons of CO_2e .
- (iv) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, report an estimate of the heat input from each type of fuel listed in Table C–2 of this subpart that was combusted in the unit during the report year.

- (c) * * *
- (2) * * *
- (ix) For each type of fuel listed in Table C–2 of this subpart that was combusted during the report year in the units sharing the common stack or duct during the report year, the annual CH_4 and N_2O mass emissions from the units sharing the common stack or duct, expressed in metric tons of each gas and in metric tons of CO_2 e.
- (x) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, an estimate of the heat input from each type of fuel listed in Table C–2 of this subpart that was combusted during the report year in the units sharing the common stack or duct during the report year.

- (e) * * *
- (2) * * *
- (i) For the Tier 1 Calculation Methodology, for each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, report the total quantity of each type of fuel combusted in the unit or group of aggregated units (as applicable) during the

reporting year, in short tons for solid fuels, gallons for liquid fuels and standard cubic feet for gaseous fuels, or, if applicable, therms or mmBtu for natural gas.

- (ii) * * *
- (A) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the total quantity of each type of fuel combusted in the unit or group of aggregated units (as applicable) during each month of the reporting year. Express the quantity of each fuel combusted during the measurement period in short tons for solid fuels, gallons for liquid fuels, and sef for gaseous fuels.

- (C) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the high heat values used in the CO₂ emissions calculations for each type of fuel combusted during the reporting year, in mmBtu per short ton for solid fuels, mmBtu per gallon for liquid fuels, and mmBtu per scf for gaseous fuels. Report a HHV value for each calendar month in which HHV determination is required. If multiple values are obtained in a given month, report the arithmetic average value for the month. Indicate whether each reported HHV is a measured value or a substitute data value.
- (D) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, if Equation C–2c of this subpart is used to calculate CO₂ mass emissions, report the total quantity (<u>i.e.</u>, pounds) of steam produced from MSW or solid fuel combustion during each month of the reporting year, and the ratio of the maximum rate heat input capacity to the design rated steam output capacity of the unit, in mmBtu per lb of steam.

- (E) For each HHV used in the CO₂ emissions calculations for each type of fuel combusted during the reporting year, indicate whether the HHV is a measured value or a substitute data value.
- * * * * *
 - (iv) * * *
- (A) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the quantity of each type of fuel combusted in the unit or group of units (as applicable) during each month of the reporting year, in short tons for solid fuels, gallons for liquid fuels, and scf for gaseous fuels.

(C) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the carbon content and, if applicable, gas molecular weight values used in the emission calculations (including both valid and substitute data values). For each calendar month of the reporting year in which carbon content and, if applicable, molecular weight determination is required, report a value of each parameter. If multiple values of a parameter are obtained in a given month, report the arithmetic average value for the month. Express carbon content as a decimal fraction for solid fuels, kg C per gallon for liquid fuels, and kg C per kg of fuel for gaseous fuels. Express the gas molecular weights in units of kg per kgmole.

* * * * *

(F) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the annual average HHV, when measured HHV data, rather than a

default HHV from Table C–1 of this subpart, are used to calculate CH_4 and N_2O emissions for a Tier 3 unit, in accordance with §98.33(c)(1).

* * * * * *

(ix) * * *

- (D) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the carbon-based F-factor used in Equation C–13 of this subpart, for each type of fossil fuel combusted, in scf CO₂ per mmBtu.
- (E) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the annual average HHV value used in Equation C–13 of this subpart, for each type of fossil fuel combusted, in Btu/lb, Btu/gal, or Btu/scf, as appropriate.
- (F) For each stationary fuel combustion source that meets the criteria specified in paragraph (f) of this section, the total quantity of each type of fossil fuel combusted during the reporting year, in lb, gallons, or scf, as appropriate.

- (f) Each stationary fuel combustion source (e.g., individual unit, aggregation of units, common pipe, or common stack) subject to reporting under paragraph (b), (c), or (d)(2) of this section must indicate if both of the following two conditions are met:
- (1) The stationary combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators that are connected to combustion units that are subject to subpart D of this part).

(2) The stationary fuel combustion source is located at a facility for which the sum of the nameplate capacities for all electric generators specified in paragraph (f)(1) of this section is greater than or equal to 1 megawatt electric output.

Subpart E—[AMENDED]

- 7. Section 98.56 is amended by:
- a. Revising the introductory text;
- b. Removing and reserving paragraphs (b), (c), (j)(1), and (j)(3); and
- c. Adding paragraphs (m) and (n).

The revisions and additions read as follows:

§ 98.56 Data reporting requirements.

In addition to the information required by §98.3(c), each annual report must contain the information specified in paragraphs (a) through (n) of this section at the facility level.

* * * * *

- (m) Annual quantity of cyclohexane fed to all production lines combined (metric tons).
- (n) Annual percent N₂O emission reduction for all production units combined.

* * * * *

Subpart F—[AMENDED]

- 8. Section 98.66 is amended by:
- a. Removing and reserving paragraphs (a) and (c)(2);
- b. Revising paragraphs (c)(3), (e)(1), and (f)(1); and
- c. Removing and reserving paragraph (g).

The revisions read as follows:

§ 98.66 Data reporting requirements.

·	·	•	•			
	(c) *	*	*			
	(3) The	e last da	ate whe	n the smelter-specific-slope coefficients (or overvoltage emission		
factors	s) were	measure	ed.			
*	*	*	*	*		
	(e) *	*	*			
	(1) An	nual an	ode cor	assumption if using the method in §98.63(g).		
*	*	*	*	*		
	(f) *	*	*			
	(1) An	nual pa	ste cons	sumption if using the method in §98.63(g).		
*	*	*	*	*		
Subpa	Subpart G—[AMENDED]					
	9.Section 98.76 is amended by:					
	a. Removing and reserving paragraph (b)(2) and paragraphs (b)(7) through (11); and					
	b. Adding paragraphs (b)(14) and (b)(15).					
	The re	visions	and add	ditions read as follows:		
§ 98.7	6 Data	reporti	ng requ	uirements.		
*	*	*	*	*		
	(b) *	*	*			
(14) Annual ammonia production (metric tons).				a production (metric tons).		
	(15) A	nnual n	nethano	l production (metric tons), if this quantity is not reported under		
subpar	t X of t	his part				

Subpart H—[AMENDED]

	10.	Section	n 98.86	is amended by:					
	a. Removing and reserving paragraphs (b)(2), (b)(5), (b)(6), (b)(8), (b)(10), and (12);								
	b. Revising paragraphs (b)(13) and (15); and								
	c. Adding paragraphs (b)(16) through (18).								
	The revisions and additions read as follows:								
§ 98.86 Data reporting requirements.									
*	*	*	*	*					
	(b) *	*	*						
	(13) N	ame of	raw kilı	n feed or raw material.					
*	*	*	*	*					
	(15) M	lethod u	ised to c	letermine the monthly clinker production from each kiln.					
	(16) A	nnual c	linker p	roduction (metric tons).					
	(17) A	nnual a	verage (clinker CO ₂ emission factor for the facility, averaged across all kilns					
(metric tons CO ₂ /metric ton clinker produced).									
	(18) A	nnual a	verage (CKD CO ₂ emission factor for the facility, averaged across all kilns					
(metric	e tons C	CO ₂ /met	ric ton (CKD produced).					
Subpart K—[AMENDED]									
	11.	Section	n 98.110	6 is amended by:					
	a. Removing and reserving paragraphs (b), (e)(4), and (e)(5); and								
	b. Revising paragraph (e)(6).								
	The revisions read as follows:								
§ 98.1	16 Data	a report	ting req	uirements.					

- (e) * * *
- (6) List the method used for the determination of carbon content for each material included for the calculation of annual process CO₂ emissions for each EAF (<u>e.g.</u>, supplier provided information, analyses of representative samples you collected).

Subpart L—[AMENDED]

- 12. Section 98.126 is amended by:
- a. Revising paragraph (b)(1);
- b. Removing and reserving paragraph (b)(2);
- c. Revising paragraphs (b)(6), (b)(7), and (b)(8)(i) through (iv);
- d. Removing and reserving paragraphs (b)(8)(v) and (b)(9);
- e. Revising paragraph (c)(1);
- f. Removing and reserving paragraph (c)(2);
- g. Revising paragraph (d); and
- h. Removing and reserving paragraphs (f)(1), (g)(1), and (h)(2).

The revisions read as follows:

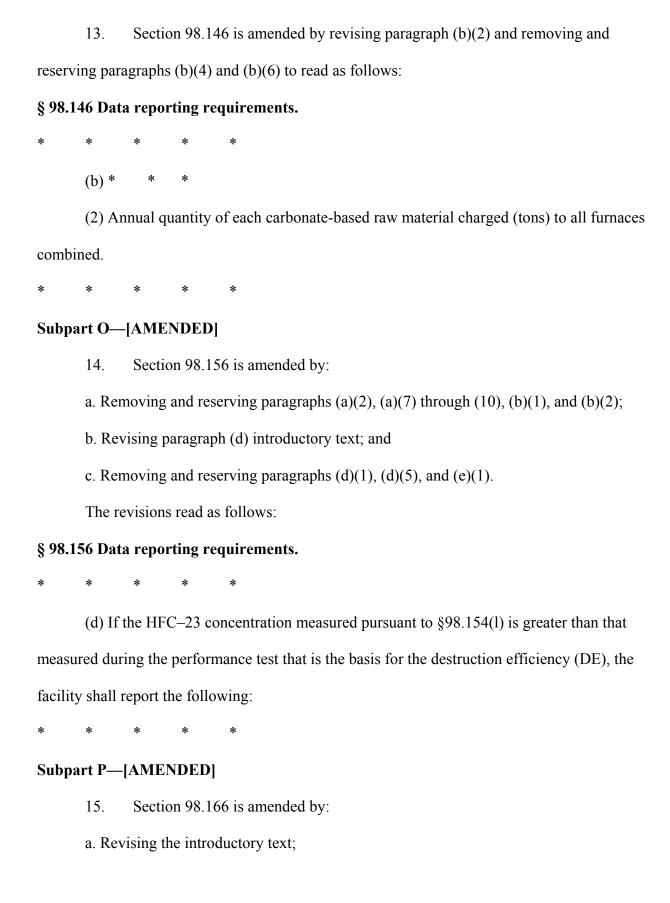
§ 98.126 Data reporting requirements.

* * * * * *
(b) * * *

- (1) If you calculate the relative and absolute errors under § 98.123(b)(1), the absolute and relative errors calculated under paragraph § 98.123(b)(1).
- * * * * *
 - (6) The chemical formula of each fluorine-containing reactant that is fed into the process.

(7) The chemical form	ula of each fluorine-containing product produced by the process.			
(8) * * *				
(i) The chemical formu	ala of each fluorine-containing product that is removed from the			
process and fed into the destru	action device.			
(ii) The chemical form	ula of each fluorine-containing by-product that is removed from			
the process and fed into the de	estruction device.			
(iii) The chemical form	nula of each fluorine-containing reactant that is removed from the			
process and fed into the destru	action device.			
(iv) The chemical form	nula of each fluorine-containing by-product that is removed from			
the process and recaptured.				
* * * *	*			
(c) * * *				
(1) The identity of the	process activity used to estimate emissions (<u>e.g.</u> , product produced			
or reactant consumed).				
* * * *	*			
(d) Reporting for missi	ing data. Where missing data have been estimated pursuant to §			
98.125, you must report:				
(1) The reason the data	were missing, the length of time the data were missing, and the			
method used to estimate the missing data.				
(2) Estimates of the mi	ssing data for all missing data associated with data elements			
required to be reported in this section.				
* * * *	*			

Subpart N—[AMENDED]



- b. Removing and reserving paragraphs (b)(2), (b)(5), and (b)(6); and
- c. Adding paragraphs (b)(7) and (e).

The revisions and additions read as follows:

§ 98.166 Data reporting requirements.

In addition to the information required by §98.3(c), each annual report must contain the information specified in paragraphs (a) or (b) of this section, as appropriate, and paragraphs (c) through (e) of this section:

- * * * * *
 - (b) * * *
 - (7) Name and annual quantity (metric tons) of each carbon-containing fuel and feedstock.
- * * * * *
- (e) Annual methanol production (metric tons), if this quantity is not reported under subpart X of this part.

Subpart Q—[AMENDED]

- 16. Section 98.176 is amended by:
- a. Revising paragraph (b);
- b. Removing and reserving paragraphs (e)(1), (e)(3), (e)(4); and adding paragraph (e)(6); and
 - c. Removing and reserving paragraphs (f)(2) through (4), and (g).

The revisions and additions read as follows:

§ 98.176 Data reporting requirements.

(b) If a CEMS is used to measure CO₂ emissions, then you must report the annual production quantity for the production unit (in metric tons) for taconite pellets, coke, sinter, iron, and raw steel.

* * * * * * (e) * * *

- (6) The information specified in paragraphs (e)(6)(i) through (vi) of this section aggregated for all process units for which CO_2 emissions were determined using the mass balance method in § 98.173(b)(1), except as provided in § 98.174(b)(4).
- (i) The annual mass (metric tons) of all gaseous, liquid, and solid fuels (combined) used in process units for which CO₂ emissions were determined using Equations Q-1 through Q-7 of this section, calculated as specified in Equation Q-9 of this section.

Final =
$$\left(\sum_{i=1}^{n} F_{g,i} * \frac{MW_{t}}{MVC} * 0.001 + F_{t,i} * \rho_{i,t} * 0.001 + F_{g,t}\right)$$
 (Eq. Q-9)

Where:

Fuel = Annual mass of all gaseous, liquid, and solid fuels used in process units (metric tons).

n = Number of process units where fuel is used.

 $F_{g,i}$ = Annual volume of gaseous fuel combusted (" (F_g) " in Equations Q-1, Q-4 and Q-7 of this section) for each process (scf).

MW_i = Molecular weight of gaseous fuel used in each process (kg/kg-mole).

MVC = Molar volume conversion factor at standard conditions, as defined in § 98.6. Use 849.5 scf per kg mole if you select 68 °F as standard temperature and 836.6 scf per kg mole if you select 60 °F as standard temperature.

 $F_{l,i}$ = Annual volume of the liquid fuel combusted (" (F_l) " included in Equation Q-1 of this section) for each process unit (gallons).

 $F_{s,i}$ = Annual mass of the solid fuel combusted (" (F_s) " in Equation Q-1 of this section) for each process unit (metric tons).

 $\rho_{l,i}$ = Density of the liquid fuel (kg/gallon).

0.001 = Conversion factor from kg to metric tons.

(ii) The annual mass (metric tons) of all non-fuel material inputs (combined) specified in Equations Q-1 through Q-7 of this section, calculated as specified in Equation Q-10 of this section.

$$NFI = \left(\sum_{i=1}^{n} O + Iron + Scrap + Flux + Carbon + Coal + Feed + Blectrode + Steel_{in} + Ore + Other\right)$$
(Eq. Q-10)

Where:

NFI = Annual mass of all non-fuel inputs (to all process unit types) specified in Equations O-1 through O-7 of this section (metric tons).

Equations & 1 through & 7 of this section (metric ton

n = Number of process units, all process types.

O = Annual mass of greenball (taconite) pellets fed to the taconite furnace(s)

(metric tons).

Iron = Annual mass of molten iron charged to the basic oxygen furnace(s) plus

annual mass of direct reduced iron charged to the EAF(s) (metric tons).

Scrap = Annual mass of ferrous scrap charged to the basic oxygen furnace(s) and

EAF(s) (metric tons).

Flux = Annual mass of flux materials charged to the basic oxygen furnace(s) and

EAF(s) (metric tons).

Carbon = Annual mass of carbonaceous materials (e.g., coal, coke) charged to the

basic oxygen furnace(s), EAF(s), and direct reduction furnace(s) (metric

tons).

Coal = Annual mass of coal charged to the coke oven battery(s) (metric tons).

Feed = Annual mass of sinter feed material charged to the sinter process(es)

(metric tons).

Electrode = Annual mass of carbon electrode consumed in the EAF(s) (metric tons).

Steel_{in} = Annual mass of molten steel charged to the decarburization vessels (metric

tons).

Ore = Annual mass of iron ore or iron ore pellets fed to the direct reduction furnace(s) (metric tons).

Other = Annual mass of other materials charged to the direction reduction furnace(s) (metric tons).

(iii) The annual mass (metric tons) of all solid and liquid products and byproducts (combined) specified in Equations Q-1 through Q-7 of this section, calculated as specified in Equation Q-11 of this section.

Products = $(\Sigma_{\downarrow}(i = 1)^{\dagger}n \otimes \mathbb{L}P + R + \mathbb{L}Steel \mathbb{L}_{\downarrow}out + Slag + Coke + Sinter + Iron + NML)$ (Eq. Q-11)

Where:

Products = Annual mass of all solid and liquid products and by-products (from all process units) specified in Equations Q-1 through Q-7 of this section (metric tons).

n = Number of process units, all types.

P = Annual mass of fired pellets produced by the taconite furnace (metric tons).

R = Annual mass of air pollution control residue from all process units (metric tons).

Steel_{out} = Annual mass of steel produced by the basic oxygen furnace(s), EAF(s) and decarburization vessel(s) (metric tons).

Slag = Annual mass of slag produced by the basic oxygen furnace(s) and EAF(s) (metric tons).

Coke = Annual mass of coke produced by the non-recovery coke batteries (metric tons).

Sinter = Annual mass of sinter produced from the sinter process(es) (metric tons).

Iron = Annual mass of iron produced from the direct reduction furnace (metric tons).

NM = Annual mass of non-metallic materials produced by the direct reduction furnace (metric tons).

(iv) The weighted average carbon content of all gaseous, liquid, and solid fuels (combined) included in Equation Q-9 of this section, calculated as specified in Equation Q-12 of this section.

$$CF_{avg} = \frac{\left(\sum_{i=1}^{n} F_{g,i} * \frac{MW_{i}}{MVC} * C_{gf,i} * 0.001 + F_{i,i} * C_{if,i} * 0.001 + F_{s,i} * C_{sf}\right)}{Fust}$$
(Eq. Q-12)

Where:

CF_{avg} = Weighted average carbon content of all gaseous, liquid, and solid fuels included in Equation Q-9 of this section (weight fraction).

n = Number of gaseous, liquid, and solid fuel input to each process unit as used in Equation Q-9.

 $C_{gf,i}$ = Average carbon content of the gaseous fuel used in each process, from the fuel analysis results (kg C per kg of fuel).

 $C_{lf,i}$ = Carbon content of the liquid fuel used in each process, from the fuel analysis results (kg C per gallon of fuel.

 C_{sf} = Carbon content of the solid fuel used in each process, from the fuel analysis (expressed as a decimal fraction, e.g., 95% = 0.95).

Fuel = Annual mass of all gaseous, liquid, and solid fuels used in process units (metric tons), as calculated in Equation Q-9.

(v) The weighted average carbon content of all non-fuel inputs to all process units (combined) included in Equation Q-10 of this section, calculated as specified in Equation Q-13 of this section.

$$CI_{avg} = \frac{\left(\sum_{i=1}^{n} NFI_i * C_{NFII}\right)}{NFI}$$
 (Eq. Q-13)

Where:

CI_{avg} = Weighted average carbon content of all non-fuel inputs to all process units included in Equation Q-10 of this section (weight fraction).

n = Number of non-fuel inputs to all process units as used in Equation Q-10.

NFI_i = Annual mass of each non-fuel input used in Equation Q-10 (metric tons).

C_{NFIi} = Average carbon content of each non-fuel input used in Equation Q-10

(expressed as a decimal fraction).

NFI = Total of all non-fuel inputs to all process units (metric tons).

(vi) The weighted average carbon content of all solid and liquid products and byproducts from all process units (combined) included in Equation Q-11 of this section, calculated as specified in Equation Q-14 of this section.

$$CP_{avg} = \frac{(\sum_{i=1}^{n} Product_i * C_{Pi})}{Products}$$
 (Eq. Q-14)

Where:

CP_{avg} = Weighted average carbon content of all solid and liquid products and byproducts from all process units (weight fraction).

n = Number of products and byproducts from each process unit as used in Equation Q-11 of this section.

Product_i = Annual mass of each product or byproduct used in Equation Q-11 of this section (metric tons).

 $C_{p,i}$ = Average carbon content of each product or byproduct used in Equation Q-11 of this section (expressed as a decimal fraction).

Products = Mass of all products and byproducts from all process units, calculated in Equation Q-11 of this section (metric tons).

* * * * *

Subpart R—[AMENDED]

17. Section 98.186 is amended by removing and reserving paragraphs (b)(6) and (b)(7); and revising paragraph (b)(8) to read as follows:

§ 98.186 Data reporting procedures.

* * * * * *
(b) * * *

(8) List the method used for the determination of carbon content for each material used
for the calculation of annual process CO ₂ emissions using Equation R-1 of this subpart for each
smelting furnace (e.g., supplier provided information, analyses of representative samples you
collected).

Subpart S—[AMENDED]

- 18. Section 98.196 is amended by:
- a. Revising paragraph (b) introductory text;
- b. Removing and reserving paragraphs (b)(2), (b)(3), (b)(5), (b)(6), (b)(8), (b)(10), (b)(11), and (b)(12); and
 - c. Adding paragraph (b)(18).

The revisions and additions read as follows:

§ 98.196 Data reporting requirements.

* * * * *

- (b) If a CEMS is not used to measure CO_2 emissions, then you must report the information listed in paragraphs (b)(1) through (18) of this section.
- * * * * *
 - (18) Annual quantity (metric tons) of lime product sold, by type.

Subpart U—[AMENDED]

19. Section 98.216 is amended by removing and reserving paragraphs (b), (e)(1), (e)(2), and (f).

Subpart V—[AMENDED]

20. Section 98.226 is amended by:

- a. Revising the introductory text;
- b. Removing and reserving paragraphs (d), (m)(1), and (m)(3); and
- c. Adding paragraph (q).

The revisions and additions read as follows:

§ 98.226 Data reporting requirements.

In addition to the information required by § 98.3(c), each annual report must contain the information specified in paragraphs (a) through (q) of this section.

* * * * *

(q) Annual percent N₂O emission reduction for all production units combined.

Subpart X—[AMENDED]

- 21. Section 98.246 is amended by:
- a. Revising paragraph (a) introductory text and paragraphs (a)(2) and (a)(4);
- b. Adding paragraphs (a)(12) and (13);
- c. Revising paragraph (b) introductory text;
- d. Removing and reserving paragraphs (b)(5)(iii) and (b)(5)(iv); and
- e. Adding paragraphs (b)(9) and (b)(10).

The revisions and additions read as follows:

§ 98.246 Data reporting requirements.

* * * * *

(a) If you use the mass balance methodology in § 98.243(c), you must report the information specified in paragraphs (a)(1) through (a)(13) of this section for each type of petrochemical produced, reported by process unit.

	(2) The type of petrochemical produced, names of products, and names of carbon-				
containing feedstocks.					
*	*	*	*	*	
	(4) The	e tempe	rature (in °F) at which the gaseous feedstock and product volumes used in	
Equati	Equation X–1 of this subpart were determined.				
*	*	*	*	*	
	(12) N	ame and	d annua	l quantity (in metric tons) of each carbon-containing feedstock	
included in Equations X-1, X-2, and X-3 of § 98.243 of this subpart.					
	(13) N	ame and	d annua	l quantity (in metric tons) of each product included in Equations X	
1, X-2	1, X-2, and X-3 of § 98.243 of this subpart.				
	(b) If y	ou mea	sure en	nissions in accordance with § 98.243(b), then you must report the	
inform	ation li	sted in p	paragrap	ohs $(b)(1)$ through $(b)(10)$ of this section.	
*	*	*	*	*	
	(9) Na	me and	annual	quantity (in metric tons) of each carbon-containing feedstock.	
	(10) N	ame and	d annua	l quantity (in metric tons) of each carbon-containing co-product.	
*	*	*	*	*	
Subpart Y—[AMENDED]					
	22.	Section	n 98.250	6 is amended by:	
	a. Revising paragraphs (e)(6) and (e)(7) introductory text;				
	b. Removing and reserving paragraph (e)(7)(ii);				
	c. Revising paragraphs (e)(9) and (e)(10);				
	d. Adding paragraph (e)(11);				
	e. Revising paragraphs (f)(7) and (f)(10) through (13);				

- f. Removing and reserving paragraph (h)(4);
- g. Revising paragraphs (h)(5), (i)(5), (i)(7), and (i)(8);
- h. Removing and reserving paragraph (j)(2);
- i. Revising paragraphs (j)(5) through (9), (k)(3), (k)(4), (l)(5), and (m)(3);
- j. Removing and reserving paragraphs (o)(2)(ii), (o)(4)(ii) through (v), and (o)(6) and (7); and
 - k. Revising paragraph (p)(2).

The revisions and additions read as follows:

§ 98.256 Data reporting requirements.

- * * * * * * (e) * * *
- (6) If you use Equation Y-1a of this subpart, an indication of whether daily or weekly measurement periods are used, the annual volume of flare gas combusted (in scf/year) and the annual average molecular weight (in kg/kg-mole), and annual average carbon content of the flare gas (in kg carbon per kg flare gas).
- (7) If you use Equation Y–1b of this subpart, an indication of whether daily or weekly measurement periods are used, the annual volume of flare gas combusted (in scf/year), the annual average CO₂ concentration (volume or mole percent), the number of carbon containing compounds other than CO₂ in the flare gas stream, and for each of the carbon containing compounds other than CO₂ in the flare gas stream:
- * * * * *
- (9) If you use Equation Y–3 of this subpart, the number of SSM events exceeding 500,000 scf/day.

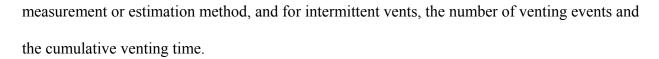
- (10) The basis for the value of the fraction of carbon in the flare gas contributed by methane used in Equation Y–4 of this subpart.
 - (11) If using Equation Y-3 of this subpart, report:
 - (i) Annual quantity of flare gas combusted (in MMscf per year).
 - (ii) Annual average molecular weight of flare gas combusted (in mmBtu per MMscf).
- (iii) Annual average carbon content of flare gas combusted (expressed as a decimal fraction).
 - (f) * * *
- (7) If you use Equation Y–6 of this subpart, the annual average exhaust gas flow rate, %CO₂, and %CO.
- * * * * *
- (10) If you use Equation Y–8 of this subpart, the basis for the value of the coke burn-off factor, annual throughput of unit, and the average carbon content of coke.
- (11) Indicate whether you use a measured value, a unit-specific emission factor, or a default emission factor for CH_4 emissions. If you use a unit-specific emission factor for CH_4 , report the basis for the factor.
- (12) Indicate whether you use a measured value, a unit-specific emission factor, or a default emission factor for N_2O emissions. If you use a unit-specific emission factor for N_2O , report the basis for the factor.
- (13) If you use Equation Y–11 of this subpart, the number of regeneration cycles or measurement periods during the reporting year and the average coke burn-off quantity per cycle or measurement period.

- (h) * * *
- (5) If you recycle tail gas to the front of the sulfur recovery plant, indicate whether the recycled flow rate and carbon content are included in the measured data under § 98.253(f)(2) and (3). Indicate whether a correction for CO₂ emissions in the tail gas was used in Equation Y–12 of this subpart. If so, then report:
 - (i) The value of the correction.
- (ii) If the following data are not used to calculate the recycling correction factor, report the information specified in paragraphs (h)(5)(ii)(A) through (C) of this section.
 - (A) The annual volume of recycled tail gas (in scf/year) only.
- (B) The annual average mole fraction of carbon in the tail gas (in kg-mole C/kg-mole gas).
- (C) Indicate whether you used the default (95%) or a unit specific correction, and if used, report the approach used.
- * * * * *

(i) *

- (5) If you use Equation Y–13 of this subpart, an indication of whether coke dust is recycled to the unit (e.g., all dust is recycled, a portion of the dust is recycled, or none of the dust is recycled).
- * * * * *
- (7) Indicate whether you use a measured value, a unit-specific emission factor or a default for CH₄ emissions. If you use a unit-specific emission factor for CH₄, report the basis for the factor.

- (8) Indicate whether you use a measured value, a unit-specific emission factor, or a default emission factor for N_2O emissions. If you use a unit-specific emission factor for N_2O , report the basis for the factor.
 - (i) * * *
 - (5) If you use Equation Y-14 of this subpart, the basis for the CO₂ emission factor used.
 - (6) If you use Equation Y-15 of this subpart, the basis for the CH₄ emission factor used.
- (7) If you use Equation Y–16 of this subpart, the basis for the carbon emission factor used.
- (8) If you use Equation Y–16b of this subpart, the basis for the CO₂ emission factor used and the basis for the carbon emission factor used.
 - (9) If you use Equation Y-17 of this subpart, the basis for the CH₄ emission factor used.
 - (k) * * *
- (3) The total number of delayed coking units at the facility; the total number of delayed coking drums at the facility; and, for each coke drum or vessel, the typical drum outage (<u>i.e.</u> the unfilled distance from the top of the drum, in feet).
- (4) For each set of coking drums that are the same dimensions, the number of coking drums in the set, and the mole fraction of methane in coking gas (in kg-mole CF₄/kg-mole gas, wet basis).
- * * * * *
 - (l) * * *
- (5) The annual volumetric flow discharged to the atmosphere (in scf), and an indication of the measurement or estimation method, annual average mole fraction of each GHG above the concentration threshold or otherwise required to be reported and an indication of the



- (m) * * *
- (3) For uncontrolled blowdown systems reporting under § 98.253(k), the basis for the value of the methane emission factor used for uncontrolled blowdown systems.
- * * * * * *
 - (p) * * *
- (2) The types of materials loaded that have an equilibrium vapor-phase concentration of methane of 0.5 volume percent or greater, and the type of vessel (barge, tanker, marine vessel, etc.) in which each type of material is loaded.

Subpart Z—[AMENDED]

23. Section 98.266 is amended by removing and reserving paragraphs (f)(5) and (f)(6).

Subpart AA—[AMENDED]

- 24. Section 98.276 is amended by:
- a. Revising the introductory paragraph;
- b. Removing and reserving paragraph (b);
- c. Revising paragraph (c);
- d. Removing and reserving paragraphs (d), (f), (g), (h) and (i); and
- e. Adding paragraphs (1) and (m).

The revisions and additions read as follows:

§ 98.276 Data reporting requirements.

In addition to the information required by § 98.3(c) and the applicable information required by § 98.36, each annual report must contain the information in paragraphs (a) through (m) of this section as applicable:

* * * * *

(c) Basis for determining the annual mass of the spent liquor solids combusted (whether based on T650 om-05 Solids Content of Black Liquor, TAPPI (incorporated by reference, see § 98.7) or an online measurement system).

* * * * *

- (l) For each pulp mill lime kiln, report the information specified in paragraphs (l)(1) and (2) of this section.
 - (1) The quantity of calcium oxide (CaO) produced (metric tons).
 - (2) The percent of annual heat input, individually for each fossil fuel type.
- (m) For each chemical recovery furnace and each chemical recovery combustion unit for which you are not using Equation C-2c of this part to calculate CO_2 emissions, report the information specified in paragraphs (m)(1) and (2) of this section.
- (1) The annual mass of steam generated (lb steam), individually for each fossil fuel type and for spent liquor solids.
- (2) The ratio of the unit's maximum rated heat input capacity to its design rated steam output capacity (mmBtu/lb steam), individually for each fossil fuel type and for spent liquor solids.

Subpart BB—[AMENDED]

25. Section 98.286 is amended by removing and reserving paragraphs (b)(1), (b)(4), and (b)(6).

Subpart CC—[AMENDED]

26. Section 98.296 is amended by removing and reserving paragraphs (b)(5) through (7).

Subpart EE—[AMENDED]

27. Section 98.316 is amended by removing and reserving paragraphs (b)(6) and (b)(9).

Subpart GG—[AMENDED]

28. Section 98.336 is amended by removing and reserving paragraphs (b)(6), (b)(7), and (b)(10).

Subpart TT—[AMENDED]

- 29. Section 98.466 is amended by:
- a. Removing and reserving paragraph (c)(3)(i);
- b. Revising paragraph (c)(3)(ii); and
- c. Removing and reserving paragraph (c)(3)(iii).

The revisions read as follows:

§ 98.466 Data reporting requirements.

- * * * * *
 - (c) * * *
 - (3) * * *
- (ii) The year of the data used in Equation TT-2 for the waste disposal quantity and production quantity, for each year used in Equation TT-2 of this subpart to calculate the average waste disposal factor (WDF).

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